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Sketch - Book

N^o 4. From May 16 - 1836

To September 7th 1836

First Drafts without connections.

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1 Pulse Glass

1
Finding this little Instrument in the
Shop of Philosophical Instruments at
Boston, I purchased it, under the
supposition that it indicated the
pulsations of the human body. It
consists of a small glass cylinder
terminating at ~~the~~ ends with ~~small~~
bulbs, about half filled with colored
alcohol, the remainder with air,
and hermetically sealed.

By grasping one of the bulbs in one
hand & holding it in an inclined
position, a part of the air included

in

in the grasped bulb, a motion of the liquid commences resembling the pulsations of the wrist, and at first seems to keep time with them. But on a careful examination I became convinced that the operation had no relation to the pulse; that the beats were not isochronal and that the motion of the fluid, as I conjectured before the experiment was made, would continue if the lower bulb was immersed in warm water & with a rapidity greater or less, in proportion to the increase or diminution of the heat of the water. The experiment justified the supposition.

Rationale of the Pulsations.

The air confined in the lower bulb, by the pressure of the superambient fluid, expands by the heat of the hand, driving the fluid up the cylinder until a part ^{of the air} escapes to the upper

4. Secretary Cass' Report on
2 Fortifications: April 7 - 1836.

In his remarks upon a militia as an auxiliary to fortifications, the secretary says, "I consider it one of the most momentous topics that can engage the attention of Congress; and the clergy that sees a plan of organization adopted suited to the habits of the people and the nature of our institutions, and fitted to bring into action the physical strength of the country, with a competent knowledge of their duty, and just ideas of discipline and subordination, will see us the strongest nation, for the purposes of defence, on the face of the globe. Certainly such an object is worthy the attention of the Legislature".

"It cannot have escaped the recollection of those who were upon the theatre of action at the commencement of the last war, that the first year was almost spent in a series of dis-
culties."

asters, which however brought 5
their advantages. We were compara-
tively ignorant of the state of military
science, and we did not fully recog-
nize our true position till we had
received many severe lessons; at what
an expense of life and treasure,
need not be added."

"If a more efficient organization
does not take place, I think the ex-
penditure on this account [field artillery]
may well be saved to the public treas-
ury. I consider all attempts to im-
prove the condition of the militia
upon the present plan, as nearly
useless, that the whole system has
become a burden upon the public,
without any corresponding advant-
age. The principal benefit which
results from the existing state of things,
is the power to call into the service
such portions of the population
as may be wanted. But this may
be attained by a simple classification
without

6
without the cumbersome machinery which at present creates expense and trouble, even which, while it promises little, performs still less".

The remarks of the Secretary are judicious, and I hope they may make an impression on the minds of the members of Congress. The "cumbersome machinery" to which he alludes, must be the present organization of the militia; and until this be given up and a different one adopted, we shall never have a respectable militia.

The Secretary's plan of defensive fortification, meets my views. He proposes to erect strong works at our principal sea ports, and navy stations, leaving other points to the defence of land troops. To me it appears that our present army should be increased to about 10,000, to serve as a skeleton to a large force in

7
case of war. A select militia, trained
in time of peace to a "constant know-
ledge of duty and just ideas of disci-
pline and subordination", to be added
to the regular force, would be amply
sufficient for our defense in any
ordinary war. If a greater force
should be found necessary, detach-
ments from the common militia
would supply the deficiency. These
detachments to be joined with, or
incorporated with the standing troops,
or the select militia. Hence it ap-
pears that an organization of the
common militia into regiments, brigades
divisions &c. is homely necessary. That
they be kept enrolled under some
head, ready to be detached, is all
that is ~~necessary~~ ^{important}; and indeed these
services will seldom be wanted,
provided the army and select mi-
litia be kept complete, under a
proper system. Nothing short of
a plan of this kind will ensure safety.

3 Old Road from Hatfield to Deerfield.

By an examination of the Survey of the road from Hatfield meeting house to the north end of Deerfield Street, made in, or about 1759, and accepted by the Court of Sessions in Hampshire County, I find the courses to correspond very nearly with the present courses. From the centre of the street at the south end, to a point near the middle, or near the south east corner of the meeting house then standing, the course by the needle, is true eleven N^y. 30° E, coinciding with the present course with great precision. By the same minutes it appears that the River at the south end, has encroached at least 22 rods upon the land, within 77 years. Should the River continue the same rate of encroachment in two centuries it will nearly reach the south end of our Street.

According to the old rule of allowing

9.
for the variation, in 1831. ~~It would~~
~~It would~~ give the course $N 14:30' E$ (nearly)
thence it is evident the needle is mov-
ing to the west (north end) with rapidity.
Say about 8 minutes in the year.

By this old survey the road from
Halfpence meeting house to the north
end of the Bowditch was laid 6 rods
wide; thence through the south mead-
ows to the lane at Simples, 2 rods;
thence to the south end of the main
lot 2 1/2 rods; thence to the North end
of Deerfield Street, the width is 5 1/2 rods.
The course from the S.E. corner ^{of meeting house}, as
a point near this corner as mentioned
above, is $N 16 E$.

Since the old survey another was
made about 1800 some amended, by
which the road from the North end
of the Bowditch & Northampton is reduced
to 4 rods in width; the other point
remaining as in the old survey,
which seems to have been made
by a skillful hand, and the width was
not.

4. Creek Indian War.

These Indians have for sometime exhibited a spirit of hostility towards the contiguous inhabitants, and are now embodied for war. A considerable number of our people have been massacred. About the middle of May the inhabitants of Wetumpka, a town on the Alabama river, or a branch of it called Talapoosa, were in expectation of an attack and were making preparation for defence. The cotton from Decatur, which at the place and Henry who kept a store about 30 miles distant, lost a quantity of goods which he was transporting in wagons to a place of security and he narrowly escaped from the Indians. Samuel is named in a Wetumpka paper, as the Chairman of a Committee of safety at that place, and a battalion of volunteers has been organized there for defence. The Governor of Alabama has ordered a detachment of about 2400 militia, to march to the frontiers;

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with this force, and another which
probably will join from Georgia, we
think the Indians will be held in
check, and perhaps driven from their
lands and unite with the Seminoles
in Florida. The Country of the Creeks
is by no means so difficult to penetrate
as that of the Seminoles; but the former
are more numerous. Every day we
are more and more convinced of
the necessity of a disciplined force being
prepared for sudden emergencies by
the U.S. Government. The regular army
and a select militia, or elite corps,
properly disciplined, would in-
sure safety to ~~our~~ frontiers; and we
hope most ardently that Congress
will rise from their lethargy and
prepare such a force, before the
frontier people suffer further de-
gradation. The war on the part of
the Indians no doubt originated in the
injustice of our Government, but whether
this is so or not, we must now

conquer them, for as a refuge or give
 up our settlements bordering on their
 territory; for when once counsel to war
 they cannot be brought to terms of
 peace by other means. To prevent a
 junction of the Creeks with the Seminoles,
 a strong force should be stationed in the
 western quarter of Florida, but as such
 a force is not found there at this time,
 a junction may take place, which would
 be an unfortunate circumstance, as
 the war may be prolonged in the sum-
 mer.

Situation as the Creeks are, between
 Alabama and Georgia, it will be im-
 possible for them to maintain their
 grounds after those states send troops into
 their settlements, and the poor fellows
 will soon be compelled to give up the
 conflict and probably their lands to
 their avaricious neighbors who will
 seize on the war as an excuse for
 for exterminating them - justice
 out of the question. The war spirit

seems to be spreading among the Indians along the western and northwestern border of the US, and should they act in concert might commit serious depredations on our own exposed inhabitants. But they are so few in numbers and so spread over the country that it is impossible for them to make much impression.

5

On — Militia Notions.

To the military man who has ~~attended~~ ^{to the} ~~the~~ service of war and perused the writings of Washington and other experienced officers, it is sickening to notice the remarks of our news paper editors on the low state of discipline among our militia. They take it for granted that this body, a few years ago, ~~was~~ ^{was} competent to the defence of the Country in any exigency, and that because we are convinced of the error of those times and are endeavoring to introduce a system better adapted to our circumstances, we are ^{supposed} hostile to

two species of force, and are endeavoring to destroy it and introduce a standing army. The same cruel notions now prevail that were found ~~among us~~ at the commencement of the revolutionary war, and which it required years for Gen. Washington to eradicate from the public mind. Fortunately he at length succeeded and saved the Country from ruin.

The confidence entertained of the adequacy of a militia for defense in case of war, is surprising, and to be accounted for only on the ground of a total ignorance of the military art. Nearly, we may say all, experienced officers are convinced of the futility of intrusting our defense to undisciplined militia; and so long as the notion prevails that all our citizens should be disciplined, there can be no real discipline introduced among them. The truth is we have been too long amused with the parade show of our regimental parades, in which the

tilt of a sword and the flourish of a stentor
of colors ~~and~~ ^{and} consciousness of great importance;
and this display added to a brilliancy
of dress, better fitted for the ball room
than the field of Mars, have been considered
the summum bonum of the military art,
and thus we have been led by an ignis
fatuus until we have lost almost every
principle of real discipline.

That those amongst ^{us} who judge of the
process of troops from such shows,
should be led into egregious errors, is
not strange; but that men of infam-
ous and judgment should adopt
similar notions is not readily explained.

We have flattered ourselves that our leading
men were becoming enlightened on this subject,
and that with their aid a system of
national defense would be adopted that
would render us respectable among the
nations of Europe, who now smile at
our infatuation and false security.
But judging from the speeches in Con-
gress, and the occasional adulations of

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some of our men in power, we almost
disparage of any improvements in our
militia system, until we shall find
its inefficiency by a war at our
door.

In a late address of Governor Ever-
ett to the ancient artillery company
in Boston, he seems to consider those
opposed to the present militia system
as hostile to the welfare of the Country;
and treats of the great facts of our old
militia in our various wars, without
alluding to the change which neces-
sarily takes place in a people as they
advance from a rude to a more
polished state, in which the masculine
virtues of frontier men are lost in
the slave & superfluous and effeminate
which abound, as riches increase.

At the close of his address, he gave
the following sentiment: "A well organ-
ized, efficient and patriotic militia
in time of peace the bulwark of the
land, in war the basis of defence:

may it be restored to the public fa-
vor.

By a restoration to public favor, does
his Excellency mean that we shall
again resort to the system of company
and regimental trainings which have
become impopular from the very
fact that they are wholly useless - a
fact that the people have learned
by experience? Or does he really be-
lieve that the former system, if restored,
would render the militia more
formidable in fight than ~~than~~ the
present. The cry about the low
state of the militia is a mere scare
crow: they to be sure make less
show, but all that ever was valuable
in them is still retained - viz. their
numbers and arms. Attempts to discipline
them were always futile, and at
this time obviously so.

His Excellency calls the militia the
basis of defence in war. Does he mean by
this that, as a military body, they are

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capable of defending the country. The
population of our country ~~is~~, to be
sure, the basis of an army, because an
army is raised from them; but it
cannot be supposed that the militia
as such, are better prepared for the
field than an equal number of other
citizens who ^{are} able bodied. The fact
is, men without discipline, in the
strict sense of the word, are unequal
field to act in large bodies against
mechanized troops. In small parties
in the woods, they may render some
service as marksmen.

Washington
Tomb
Tombston
a militia
In a letter from Gen. Washington to
the Governors of the States, written
in 1780, after an effectual trial of the
militia in various campaigns, he
says "It is time we should get rid of
an error, which the experience of all
mankind has exploded, and which
our own experience has daily taught
us to reject; the carrying on a war
with militia, or which is nearly the

same thing, temporary lives against a
permanent, and disciplined force.
The idea is chimerical, and that we
have so long persisted in it, is a reflec-
tion on the judgment of a nation so
enlightened as we are, as well as a
strong proof of the empire of prejudice
over reason. If we continue this in-
fatuation, we shall deserve to lose the
object for which we are contending.
America has ^{been} almost arraigned out
of her liberties. We have frequently
heard the behavior of the militia ex-
celled upon several occasions, by
men who judge only from the sur-
face, by men who had particular
views in misrepresenting, by visionary
men whose credulity swallows every
vague story in support of a favorite
hypothesis. I solemnly declare,
I never was witness to a single in-
stance that can countenance an opin-
ion of militia or raw troops being
fit for the real business of fighting. I have

Delphinium

found them useful as light parties
 to skirmish in the woods, but in-
 capable of making or sustaining
 a serious attack. This firmness
 is only acquired by habit of dis-
 cipline and service. I mean not
 to detract from the merits of the
 militia; their zeal and spirit up-
 on a variety of occasions have entitled
 them to the highest applause,
 but it is of the greatest importance
 we should learn to estimate them
 rightly. We may expect every
 thing from men that militia are
 capable of; but we must not
 expect from any, services for which
 regular alone are fit. (Thus he)

Gov. Everett may rely on ~~the~~ a
restored militia for a basis of de-
 fence in case, but Gen. Wadsworth
 it is obvious, placed no confi-
 dence in such forces.

In a late Report of Secretary
 Cass, on the subject of particu-

cations he says. "It cannot have
 escaped the recollection of those
 who were upon the theatre of action
 at the commencement of the last
 war, that the first year was almost
 spent in a series of evolutions, which
 however brought their advantages.
 We were comparatively ignorant of the
state of military science, and we did
 not fully recover our true position
 till we had received many severe
 lessons; at what an expense of life
 and treasure need not be stated."

For several years previous to this
 war, the Country, and especially
 the northern States, had made
 great exertions to discipline ~~the~~
 the militia ~~which~~ ^{and it} was surpassed
 by many ^{more} to ~~consequence~~ at considerable
 expence; yet says Secretary Cas-
 well we were comparatively ignorant
 of the state of military science. admit-
 ting this as a fact, those who
 are so zealous of inculcating the

whole of our unrolled men, may
 learn how little can be done
 towards the requisite instruction.
 With all our exertions, military
 service has been on the wane,
 and this must have effected
 a system far removed on the basis
 which attempts make all sol-
 diers. The remedy is plain
 and easy. Select a small part
 of the unrolled men and dis-
 cipline them a sufficient time
 in the field, render them
 subsistence, and hold them
 ready for the ^{service} ~~field~~ on the
 slightest notice; the remainder
 to be kept armed, and to make
 return of their arms and equip-
 ments annually, and ^{full} ready to
 supply recruits for the elite,
 as circumstances may require.
 This scheme ~~was~~ ^{is} covered
 with effort and continued, the
 country would be safe and

military science in time of peace, in-
stead of war, found prophetic.

See page
4. Shick-
er.

of the importance of a proper system
for a militia, Secretary Cass seems fully
aware; he says "I consider it one of the
most ~~important~~ momentous topics that
~~that~~ can engage the attention of Congress,
since the day that saw a plan of or-
ganization adopted, suited to the hab-
its of our people and the nature of
our institutions, and fitted to bring
into action the physical strength
of the country, with a competent
knowledge of their duty, and
just ideas of discipline & subordi-
nation, will see us the strongest
nation, for the purposes of self de-
fence, on the face of the globe. Cer-
tainly such an object is worthy
the attention of the Legislature."

Speaking of the militia under
the present system he says, "I con-
sider all attempts to improve the
condition of the militia as nearly

useless, that the whole system
 has become a burden upon the
 public without any compensa-
 ting advantage. The principal
 benefit which results from the
 existing state of things, is the pow-
 er to call into service such por-
 tions of the population as may
 be required. But this may be
 attained by a simple clasifi-
 cation, without the cumbersome
machinery which at present
 entails expense and trouble,
 and which, while it promises
 little, performs still less.

Does Geo. Everett believe the
 Secretary is hostile to a militia, be-
 cause he would repudiate the
 present plan?

Let him reflect further on the
 subject and we are confident
 his penetrating mind will not
 long continue in the error into which
 he, and others of our station, have

sufficed themselves to rise, from the
false glare that has hitherto been thrown
around the childish military parades
of our citizens at our annual musters,
where meretricious show has usurp-
ed the place of real discipline and
created a false reliance on our na-
tional finances, ~~from~~ which we
fear, nothing will clear away. But
^{bloody} ~~ever~~ ~~brave~~ ~~shot~~ home to our fine sides

6 The Weather.

The uncommon severity of the past
winter we have frequently noticed, and it was
a question with us whether the sum-
mer which was to follow would
present any thing uncommon. as we
conjectured it might; and up to this
June 25, we have found the season
cold and of course vegetation back-
ward. For a number of days we have
had a series of cloudy weather, thick-
with rain, and the heavens contin-
ue covered with dense clouds. So cool

is the air, that fires are required to keep our sitting rooms comfortable, and a winter chup is not offensive. A continuance of this weather will be unfavorable to the crops of Indian Corn, which is the great staple of our meadow lands.

7. ⁷ Traverse of Sheldon's Brook, from the small Bridge over the same, on the Shelburn road, to its mouth opposite to White Swamp in Deerfield North meadow, taken by E. T. Arms, June 1836
- Note The bridge mentioned above is across the 2^d Brook Southwally of Lowmidge house; another brook is found further north called Cary's brook.
1. E 18° S. 14 Rods to Cary's brook
 2. S 23° E 26. 3. S 44½° E 26. 4. S 35° E 20. 5. E 9 S 50
 (in this course I suppose a tally too much is included) 6. N 41½° E 12. 7. E 8 S 11. 8. S 43½° E 29½ (at 12½ E Cary's bridge) 9. E 4 N 26. 10. S 60½° E 49-7 to NW L Jones Barn. 11. E 10½ S 38. 12. N 45° E 8. 13. E 9 N 14. 14. S 47½° E 12.

15. E 3 S 5. 15. 11. S 40 E 6 to D. River.

The traverse was made near the brook, the stations sometimes on side, and some times on the other: the brook being often very serpentine, crossing the courses back and forth. From the commencement of the traverse to Eddy's bridge the brook is in a deep valley, from that point to Janes the valley expands, but is again narrow thence to its mouth.

The variation of the needle at the time must have been 7° - 15° west, nearly

within my recollection the Brook entered Deerfield River near the upper end of Ely's Swamp, a considerable distance below its present mouth. The alteration is owing to the abrasion of the left bank of the river, above the brook. Near its mouth was formerly a good ford, and another below. A road formerly ran from the head of Ely's Swamp up the hills & rather steeply across Pettys Plain, the same I suppose traversed by the Indians with the ^{Deerpaw} ~~Deerpaw~~ ^{Deerpaw} in 1704. ~~in 1704.~~

8 At the top of the 2^d hill ~~near Dutch Brook~~ ^{since my remembrance}
 stood a large pitch pine tree, on which
 was cut out a representation of a human
 body, supposed to be carved by
 the Indians who sacked Deerfield
 in 1704. ^{Herbert} ~~uncle~~ ^{Noville}. The tree was
 cut and removed by John Williams
 Esq^r to be placed in a museum, but
 I believe never so placed. I saw it
 in his wood yard some time after
 when it must have decayed.

It is supposed Capt Turin crossed
 Deerfield River at ~~the mouth of~~ ^{the mouth of} Shuteau's
 brook, on his march to the Shad Falls,
 from Hatfield, and that his ^{men} returned
 on the same route followed by the
 enraged Indians. His expedition
 was in 1676.

Near the mouth of this brook ~~and~~ ^{up}
 nearly as high as James house ~~we are~~ ^{my father} informed
 Noville deposited his snow shoes and
 baggage, when he advanced to attack
 the village of Deerfield; and on the
 same evening the prisoners were

bound to be massacred in case his
force was defeated in the action that
occurred in the meadow south. These
reminiscences render this ground in-
teresting to the antiquary, and I sel-
dom pass it without reflections on
the appalling situation of our fore-
fathers and their subsequent French
fate. This ground before it was cleared,
was famous for partridge, and here I
have indulged myself in hunting
them, and generally with good success.
The land about the brook is much
cleared of its woods; ~~but the~~
~~remains of the~~ ~~forest~~ by the ~~side of the~~
~~stream~~ ~~and~~ The shrill war-
whoop and mighty howl of the
wolf, has long since given place to
the peaceful arts of agriculture. The
ground should not be forgotten by the
sons of the sufferers.

Where the Brook divides its name does
not appear, unless it be from a field
cultivated by one of that name near Jones House

9 The Microscope.

"Why has not man a microscopic eye?"

"For this plain reason, man is not a fly."

"Say what the use were Linnaeus gave,

"To inspect a mite, not comprehend the *human*?"

The Poet here supposes that to possess any of the sensitive faculties in a higher degree, would render man miserable.

How far this may hold true is a question not readily solved. If it be true that our first parents were created with higher faculties than we now possess, it would be hard to admit that we should have ^{been} less happy by retaining ~~any~~ ~~any~~ primitive state.

But be this as it may, it is certain a microscopic eye is not necessary for man, whatever it be for insects, which we suppose possess none of those inventive powers found in man. The latter by a due use of his powers is capable of almost unlimited improvements; and though not furnished with a microscopic eye, by his

power of invention he can provide instruments which, perhaps, enable him to discover objects more minutely than the ^{superior} supposable sensitive faculties of the insect.

The invention of the microscope has opened to us a new world, not only of animated beings, but of inanimate forms, which could not have been known without this instrument; and we may now be said to possess microscopic eyes, which enable us to see the minute works of Deity in considerable perfection; ~~and~~ ^{which} excite our wonder and astonishment; and where

"Presented to the cultured eye of taste,
no rock is barren, and no wild is waste."

aware of the importance of the microscope in the study of natural history I have long been desirous of obtaining one of those instruments, to be kept in my family; but the expense of ~~one~~ has been beyond my means, and I have until lately been obliged to acquire my

information on microscopic discoveries,
from authors who have been more
fortunately situated than myself.

Recently, calling at the ^a philosophical
Instrument makers shop of Claxton &
Wightman in Cornhill Boston, I found
a cheap compound microscope, mounted
on a wooden stand, neatly varnished,
furnished with two magnifying lenses
of high powers, reflector & two slides
with six different objects. Some of the
requisite apparatus is wanting, but
can be easily supplied, so as to render
the instrument fit for most pur-
poses.

Among the objects which I have
examined under the instrument none
have been more pleasing than the
crystallized salts. Solutions of ~~these~~
~~these~~ ^{these} spread upon clean plain
glass and ~~evaporated~~ ^{exposed} in the rays
of the sun, form most beautiful crys-
tals of a pleasing appearance, differing
in their form, each preserving its peculiar

33.

live structure. ~~The~~ Crystallized alum
presents a very pleasing view of columns
thin, and angular contours resembling
mountains on nicely engraved maps,
with their various shades. Muriate
of Sol, or common culinary salt, presents
square pyramids very distinctly
marked. Other salts present pleasing
varieties of crystals and all highly in-
teresting to the reflecting mind.

In the use of the microscope much
depends on a skillful application of
the light reflected from the mirror.
When the field of view is white, objects
will appear dark, or even black; but
with a dark field, the same objects will
present a beautiful white. This is the
case with small masses of table salt,
and other substances through which
the reflected rays cannot penetrate. But
if the salt be illuminated by light from
above it appears in its proper colour.

The crystals of nitrate of potash,
or salt-petre present forms very sin-
gular

quadrangular, often resembling prisms like
hewed timber, framed together in various
directions, sometimes forming right angles
and parallel sides. the lines perfectly
straight. Figures resembling a fluer de
lance are seen. and geometrical surfa-
ces of an octagonal form meet the eye,
and others of a ^{most} fantastical form, all
very pleasing to a careful examin-
er.

For a description of the ~~Crystalline~~
Forms hitherto observed in the min-
eral kingdom, See the article Crystal.
lography, Edinburgh Encyclopedia
Vol. 7. Chap. 3: And for the manner
of elicting crystals, see work &
art. Chap. 1. Under this article the
subject of Crystallography is treated
of great considerable length, and much
light thrown on the subject.

A careful examination of the
laws of nature, cannot but excite
the wonder ^{or admiration} of the natural philosopher,
and lead him to serious re-

fluctuations on the profound works of
 Deity. Mr Bowker has the following
 pertinent remarks on this subject, in
 his Chemical Catechism. "We have —
 abundant reason to believe that no-
 thing is fortuitous, but that every
 thing upon this fair world of ours
 is the effect of design; for every thing
 around us bears evident marks of
 the skill and beneficence of its Om-
 nipotent Author. Is it not then
 reasonable to infer, that the formation
 of the whole globe entered into the
 divine plan; and that the consti-
 tution of the interior of its mountains
 resulted from the determination of
 infinite wisdom, and must have
 important uses in some future pe-
 riod of the world?"

With such a view of the works of nature,
 how paltry must appear that system
 of divinity which repudiates the study
 of natural philosophy, as the empty
 & useless invention of man?

The Weather.

At our last notice, June 25th, the weather was cool and uncomfortable without fine. For several days past (July 8th), we have had the usual summer air which enables us to throw off our winter clothing. The meridian altitude of the Sun, this day, is about 90 degrees = 20 from the zenith, and his rays are acting with full vigor, and there are no intervening clouds. Our farmers are now engaged in gathering their hay but later than common. In some seasons this business is completed by this time. This season is always a busy one. our laborers work hard and suffer much from the hot weather, but they make use of little or no ardent spirits - water being the principal drink. Quinine, either ginger and sugar mixed with water, would not be more wholesome? Commonly we used common table beer, prepared from malt & hops.

but this was at length almost
wholly laid aside, and evilest spirits
introduced, or most pernicious prac-
tice. We are glad to witness the
reform and hope it will be perpetu-
ed.

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Eyes of Insects.

Unlike large animals, the eyes of in-
sects are fixed, or incapable of motion;
hence it is necessary for some con-
trivance to enable them to see objects
that do not present themselves direct-
ly in front of them. In general, in
insects, there are two convex eyes, one
on each side of the head, prominent
and rising rather more than hemis-
pherical. To the naked eye their surface
appears plain; but by help of the mi-
croscope it is found that the whole
surface consists of a multitude of lenses,
several rows are another by
hexagonal figures, and placed in re-
gular order, something like a multiplying

reflector. Leeuwenhoek says each eye is composed of 3.000 optical organs consequently both eyes double that number. In different insects the number varies. It is said Leeuwenhoek counted 8.000 in the eye of a common house fly, and that Hooke computed 7.000 in that of the house fly. In a butterfly Pruget found 17 325.

Thus furnished insects are enabled to see objects in all directions, and hence we find it difficult to seize a common house fly by surprise. Their sight seems to be extremely nice; but when these objects are more magnified on the microscope than in our eyes, does not appear. From an experiment said to be made by Leeuwenhoek, we might suppose objects are diminished. Having prepared and fitted one of these eyes (which when separated were made clear the lenses were transparent), to a microscope he could see through it clearly, but the largest objects were diminished to a small size in

some instances even to the point of a needle, seen with the naked eye. Many insects are said to have, besides the large eyes, also 3 small spherical bodies placed triangularly on the exterior of the head, called by writers on entomology, ocelli, or Stemmata. These are seen when the insect is submitted to the microscope, and what once their particular use, I know not. If flies, they cannot see objects situated far out of a direct course.

In the structure of the eyes of insects, we have further proof of design, in the executor. Considerations of this kind "raise in us the most magnificent ideas of the Supreme Being, who is everywhere and at all times present; displaying his power, wisdom and goodness among all his creations, and distributing happiness to innumerable ranks of various beings."

Old Age.

12.

The immediate cause of the infirmities of age, or of the progress of life to death, Dart. DeCuvier says, has not yet been well ascertained. The answer to the question, why animals become feeble and diseased after a time though nourished by the same food, which increased their growth from infancy and afterwards supports them for many years in unimpaired health and strength, he says, must be sought far from the laws of animal excitability, which though at first increased is afterwards diminished by frequent repetitions of its admitted stimulus, and at length ceases to obey it. See Note 7. on this subject. "Lampade of Nature, or the origin of Society, &c Poem" page 58

The Dart, in the same note, treats of the means of preventing the approach of age, which he says must

consist in preventing the inexcitability of the fibres, or the diminution of the production of sensorial powers; and he lays down the following.

As animal motion cannot be performed without the fluid matter of heat, in which all things are immersed, and without a sufficient quantity of moisture to prevent rigidity, nothing seems so well adapted to both these purposes as the use of the warm bath; and especially in those who become thin or emaciated with age, and who have a hard and dry skin, with hardness of the coat of the cuticles; which feels under the finger like a cord: the patient should sit in warm water for half an hour every day, or alternate days, or twice a week; the heat should be about 90 degrees on Fahrenheit's scale, or of such a warmth as may be most agreeable to his sensation; but on leaving the bath he should

always be kept so cool, whether
 he goes into bed or continues up,
 as not sensibly to perspire. During
 the continuance in the bath the
 patient does not lose weight, unless
 he goes in after a full meal, but
 generally weighs heavier, as the
 absorption is greater than the pers-
 piration; but if he suffers himself
 to sweat on his leaving the bath,
 he will undoubtedly be weakened
 by the increased action of the sys-
 tem and its exhaustion: the same
 occurs to those who are heated by
 exercise, or by wine, or spice, but
 not during their continuance in
 the warm bath: whence we
 may conclude, that the warm
 bath is the most harmless of all
 those stimuli, which are greater
 than our natural habits have
 accustomed us to; and that it
 particularly counteracts the ef-
 fects of old age, in enervated

people with dry skins. The Scut. uses the term old age for the debility of age, and not the years which have passed over us.

Of the benefits to be derived from the warm bath I am fully persuaded, and it is to be regretted that we do not, in erecting our houses, accommodate ourselves with convenient rooms and implements, for this healthy as well as pleasant practice. Those who arrive at old age, must expect to partake of its debility; but by due care the body, and perhaps the mind may retain, in some degree the faculties of the middle age, until it has in fact been worn out. As respects myself, now in my 71st year, I feel a want of the sensorial power which I possessed in middle age, and it is with some difficulty I can keep up a sufficient degree of warmth in cold weather; and during the same period of the present summer, I found it

necessary to wear the same clothing
 that I did in the winter season,
 to keep the body warm; and it
 was not until the hot season be-
 came, in the latter part of June,
 that I felt myself restored to a
 due degree of warmth. Since this
 I have pursued fully, ~~thereon~~
 off a cover of a dead article.
 and once more feel a warmth, with-
 out winter clothing. Probably
 a proper use of the warm bath
 would have produced the same
 effects at an earlier season. Another
 effect of this warmth and perspi-
 ration has been to relieve me
 from a cough and flow of mu-
 cus from the lungs, which usually
 prevail in cold weather. A resi-
 dence in a warmer climate, during
 the winter season, I believe would
 be promotive of my health. But
 as this is not within my power, I
 must submit to the fate of age in cold
 climates.

Singular Escape of an Officer.

In various tours over the country between Senatogo and ~~the~~ Lakes George and Champlain, I have taken pains to ascertain the places where many military events occurred in the war of 1755, as well as that of our revolution. In these researches I was much assisted by accounts given me by officers & men who served in the various campaigns, and in some instances by inhabitants of the country, though rarely are there any to be found who were personally concerned in the events.

The following ^{is an} adventure of an officer, Major Seth Cutler of this town, who served in the campaigns under Generals Abernombie and Amherst, and was in the battle of Ticonderoga in 1758, then an Ensign.

On the 28th of July 35 baggage wagons principally from Dutchess County in the State of New York, were ordered to

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proceed from Fort Edward to Lake George under an escort; at that time the country was covered with woods excepting small openings about a few advanced posts on the road. Ensign Cutler was ordered to march with the convoy, as the bearer of a letter from the commander at Fort Edward to the commander at the Lake.

Armed with a fusce and feeling con-
fident of security, he set out some
time before the waggon; and arriving
on the low ground bordering on Cole
brook, between the present village
of Sandy Hill and Gains-falls, he co-
sided a raven feeding in the road, and
determined to give him a shot, by
carefully edging along the side of the ~~road~~
^{112. 45} ~~highway~~ covered from him, by the thick
bushes; but before he could gain the
proper distance the game took flight
once again, settled in the road some
distance ahead. Making another
effort for a shot, the bird again

avoided him, and once more settled in
 the road. In this manner he passed over
 the low ground and rose upon the
 plain beyond, vexed at the sagacity
 of the birds. By this time the convoy
 and waggons arrived at the place
 where he first started his game. In-
 stantly the savage yell and a heavy
 discharge of musketry filled the woods
 from the side of the road where he had
 just part, and havoc and confusion
 followed. Completely surprised, little
 resistance was made by the convoy, and
 the affair was soon over. According to
 the reports of the clay 11,000 dollars in
 cash with the principal part of the
 baggage and 21 women accompanying
 it, were carried off; ^{or destroyed} the many are said
 to have numbered 600. At the recollection
 of the feelings of the Emperor at this
 moment; he saw the danger he had
 escaped, and that his life had been
 suspended by a brittle thread. The
 bird occupied no more of his attention

and by a rapid march he gained his distance just at the lake, probably with little inclination for another sprinting bout.

This extraordinary escape was owing wholly to the knowledge the enemy had obtained of the march of the baggage; ~~this~~ being their prime object, they well knew that an attempt to kill or capture the officer, would have done a shot, discover their ambuscade and defeat their design on the valuable baggage.

This officer was noted for his firmness, and was much esteemed by the British officers with whom he afterwards became acquainted; and particularly by the gentleman Major Smellie of the Scotch Highlanders. It is said that Genl. Amhurst noticed him for his activity and perseverance in his various duties, particularly at the head of fatigue parties; and he often served on adventurous expeditions under

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the noted partisan Major Robert
Rogers, who commanded a corps of
Rangers throughout the war of 1755
called the French war. Retaining his
loyalty to the British Government at
the commencement of our revolution,
he was precluded from serving in our
army. Had he espoused the American
cause and offered himself for service
it is presumed he would have found
an elevated military ^{Station} office. But he was
a true friend of his country and after
the peace of 1783, was often called upon
for patriotic duties connected with his
country's welfare. In quelling the Shay's
insurrection in this State he was very
active, and his former military ex-
perience rendered him highly val-
uable. He possessed a generosity and
nobleness of soul not ^{commonly} found
in those who have been in one ^{troubled} ~~troubled~~;
and good men generally esteemed
him for his usefulness. He deserves
our affectionate remembrance.

* The most notable places on the Hudson City on the left, are
 lengthwise New Windsor on the right. many Gentlemen's seats are scattered
 along the banks, especially at New Windsor. Below west point we notice a few
 hills, the most considerable of them are many, and of interesting form the most
 being a part of the Revolution. our way is chiefly, however, gone in but short views.

Spreading into morasses; but the ~~land~~ ^{as we proceed along the River the banks} ~~become~~ ^{become} steep
 and rocky and the land appears
 rather sterile. Now and then, when
 they recede, leaving recesses, villages
 and single houses appear on the
 margin of the River. In the south
 high lands are seen towering up
 their summits to great heights, at
 about West point they ^{mountain} approach the
 river and present sublime views
 on each side. as our boat made but
 short stop at the point, I had no
 opportunity to view this place, so cel-
 ebrated in our revolutionary History.
 At the entrance of Flushing Bay
 we past Stony point on the west side,
 the place so gallantly stormed by
 Gen. Wayne in 1778. on which is a light
 house. So on after passing the Tappan
 Sea, a wide expansion of the River, the
 evening approached and we lost
 sight of the interesting scenery which
 is said to exist on each side, towards

the city of New-York. After the bus-
 tle of ~~packing~~^{stopping} up trunks, and em-
 ploying Porter to carry them to quarters
 we proceeded to our night lodging
 in Broadway. When we landed we
 found on board as I estimated there,
 about 300 passengers, many of whom
 came on board at various landing
 places on the river, not one of whom
 I recollect to have seen before.
 But on the passage I found means
 to introduce myself to several gentle-
 men who were delegates to the con-
 vention from the states of Vermont
 and New-York. Knowing that Mr
 Barber of the former state was a dele-
 gate I conjectured that he might be on
 board, and on enquiring for him
 I was informed he was one of our
 passengers, and he was immediately
 pointed out to me. On making
 myself known to him he intro-
 duced ^{me to} several other delegates; after
 which I found means ^{to} ~~to~~ ^{presented} to our cause.

in abundance, all bound for Baltimore to attend the Convention.

At that time masonry and its opponents were so hostile to anti-masonry, that an introduction to a stranger, without first ascertaining his sentiments in relation to the contest, might have subjected me to a cold reception, if not abuse.

Friday 23. Sailed from New-York for New Brunswick in New Jersey, touching at Elizabeth^{town} point to take in passengers among whom were Mr Vandervoort and Mr. Alling delegates from that State.

Among the passengers I met with Col. Burdick ~~another~~ delegate, from the County of Worcester in Massachusetts.

The shores of Riverton ~~river~~ ^{which is a small} are extensive marshes, filled with stalks of marsh hay, and the grass in many places from four to six feet high.

New Brunswick, at the head of navigation, is a place of note; but some parts of the town are rather low and muddy, especially at the landing.

The banks of the river here are elevated, and present a red soil, & the rocks seem to be composed of red sand stone, of a deep hue, and this ^{coloured} soil is found some distance on the road west of the town.

At this place ten carriages were waiting to receive us, in which we immediately proceeded westward for Princeton, and of course had no time to reconnoitre the place, rendered interesting from the operations of the American & British armies in our revolutionary war.

From New Brunswick to Princeton, ~~the country~~ ^{the country} is ^{generally} level and no place of note ~~presented themselves~~ ^{arising on the route} on the route. Farms and straggling houses are seen, with a few small villages, and the land appears ^{good} ~~good~~ where it is properly cultivated. The roads were rather defective and appeared to have been neglected by the inhabitants. At Princeton

the country assumed a different aspect; here the lands were in a high state of cultivation, and fenced into ~~large~~ fields indicating industry and economy in the inhabitants. The village appeared flourishing, and the College presented a handsome aspect, and I regretted that I could not detain a short time in viewing them and the adjacent fields, rendered famous from the battles of Gen. Washington's army and the British force stationed here ^{in 1777}. I however noted the ground where the action commenced, and where Gen. Mifflin fell, which was in sight of the roads. Gen. Wilkinson's plans of this attack, I judged, were good combinations of the topography of the place.

From Princeton to Trenton, distance about 10 miles, the ground became more uneven, but much of the same quality as that we had passed on the road to Princeton. Trenton we found to be a

homely ^{cluster} of houses; is the
 Capital of the State once supposed to be
 a place of business; but we had no
 time to give it an examination,
 when the operation of Washington
 Army in ^{the winter of} 1776 and 1777 ~~was~~ ~~had~~
 reached intently to military men.

At Trenton we took passage to
 Philadelphia in a steam boat, where
 we arrived ~~at dusk~~ in the early part
 of the evening.

The passage down the Delaware
^{afforded pleasing views}
~~was very~~ ^{pleasing}; the river ex-
 hibits broad surface much beyond any
 I had seen in New England, was as
 smooth as a mirror, and our boat
 glided along with the rapidity
 of a race horse; ~~the~~ country on
 each side was ^{quaintly} ~~as~~ far as the eye
 could reach, presenting farms and
 scattering houses and a few villages.
 Bristol on the right bank appeared
 like a little paradise; green ~~land~~
 opening from the houses down to the

western edge, fringed with weeping willows displaying their pendent limbs in the water, partially hiding the elegant buildings from the sight, it is said to be a place of fashionable resort, especially in the summer season. Our boat, as if attracted by its beauties, by an easy curve touched a few minutes at the wharf & took in passengers.

The handsome town of Burlington on the Jersey Shore next brought us to its wharf, where passengers were waiting our arrival. This place presents also a highly beautiful aspect and evinces great taste in its inhabitants.

At last we reached the City of Penn, and as we glided along near the shore, the clearest aspect of the continuous buildings was ^{now} broken through, as we came in a line with the rectilinear streets extending to the west. our landing was at Chestnut Street wharf, whence a part of the

Delegates proceeded to the Indian House where we put for the night. In bringing our boat to the wharf a sudden change of its direction withdrew my attention from the points of compass, and I immediately formed myself ^{imaginatively} so invested as to ~~conceive~~ ^{conceive} the City to be situated on the Jersey shore: nor was it possible for me to remove the deception until we had proceeded some distance down the River next morning; and what rendered the deception more extraordinary, was my acquaintance with City, where I had resided for some time, about 40 years ago.

Saturday 24. At an early hour we left Philadelphia in a steam boat, for the Chesapeake & Delaware Canal. on this run we passed Red Bank on the Jersey shore, and the ruins of Mud Island fort. Several renowned persons in our revolutionary war; the

from the repulse of Count Darn of
 Hessian detachment, and the latter for
 its brave defence against the British na-
 val force in October 1777. Here I could
 have spent a few hours of interesting ram-
 bles on the adjacent shores, in tracing the
 military operations of the American and
 British forces; but our various boat
 landed the indulgence, and ~~was~~ in a
 few minutes ^{we} lost sight of these interest-
 ing places, and other scenery attracted
 our notice. On the right Wilmington
 in Delaware presented itself to our
 view on an elevated situation be-
 tween Brandywine and Christiana
 creeks. Its appearance was inviting &
 is said to be a place of ^{amusement} great resort for
 people of fashion in the warm season.

On our passage down the Delaware
 a gentleman on board proposed a col-
 lection for the suffering Poles in Europe.
 all hands were summoned to do so
 and a regular organization of President
 and Secretary ^{of the meeting} made. My mittee

title being known, I was nominated
and chosen President; but I de-
clined the honor, with some doubts
of the utility of the proposal; and
another was chosen in my stead.

After the usual proceedings and
voting by crys and noes, edamode
the Santhons, the contribution box
was passed; and after such marks
of respect the General could not
honorably refuse his mite. Like
the ^{the} Polis received ^{an acknowledgment} ~~this~~
is not known.

On our arrival at the outlet of
^{Delaware Chesapeake} the Canal, our trunks were put
on board of a house boat and we
were soon moving pleasantly on
the canal, 13th miles in length, of a
sufficient depth for ^{light} ~~small~~ sea vessels.
Part of the ^{up} river part along low ground
embanked on one side, forming a
considerable extent of water. We
then entered the deep cut of 70
or 80 feet; over which is a bridge of

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one arch, ~~which was~~ suspended in
the air ~~at~~ a frightful elevation.

The land bordering on the canal pre-
sented a sterile appearance of ~~wild~~
worn out fields with very few houses,
as if deserted by its ~~inhabitants~~ ^{inhabitants}.

At the entrance of the canal into
Chesapeake Bay, a few houses were ~~found~~
seen and here a steam boat for Baltimore
was ready for our conveyance, and
we were soon on board and under
rapid motion down our arm of
the bay, for that city. Entering the
broad Chesapeake our view was
extensive, but no large villages
were in sight. A few rolling prairies
indicated that we were in salt water.
A steam boat filled with passengers
passed us on her course to the land
we had left; the transit was as
rapid as two comets in opposite directions,
and the scintillations from the
flues rendered the comparison very
apt.

I have anticipated a run of several hours, before reaching Beethamone, but in a short ^{time} we were up with north point, entered the Potomac & once ~~Beethamone~~ ^{the city} was soon in sight. Passing past M. Henry on the left, we landed at the steam boat wharf, where the officious porters were ready to convey our trunks to quarters (5 o'clock P.M.)

Took quarters at a boarding house in South Street, with a number of accompanying delegates. many of the members from Massachusetts had previously arrived & taken quarters at Barrum's Hotel, at the corner of Market and Hanover Streets, near the Beetham monument.

Sunday 25. By invitation I attended a Methodist ~~Service~~ ^{Service} and heard an address from one of the most eloquent orators. The discourse was directed of the common rant of

perfections of this order in our part
 of the country, and the audience
 exhibited more of that enthusias-
 tic zeal often observed at meetings
 of this sect. The preacher was a young
 man ^{scarcely} of extensive service, and much
 esteemed by the respectable part
 of ~~the~~ ^{community} who were acquainted with
 his talents.

Monday 26 The delegates assembled
 at the saloon of the Athenaeum and
 were called to order by Judge Burt
 of Orange County in New-York, and
 John Rutherford of New Jersey was
 placed in the Chair to preside at the
 organization of the convention. The
 votes for President being collected,
 John C. Spencer of New-York (State)
 was found to be elected.

John Rutherford of New Jersey
 Jonathan Stoddard of Ohio
 Thomas Elder of Pennsylvania
 John Beider of Massachusetts
 were the Vice Presidents.

Benjamin L. Hallett of Rhode Island
 Edward D. Barker of Vermont,
 Sheldon C. Leavitt of Connecticut,
 Caleb Emery of ~~New~~ Hampshire
 were the Secretaries.

After transacting other business
 the Convention adjourned to 10
 o'clock the 27th.

Tuesday 27. met according to
 adjournment. The Hon. Chief
 Justice Marshall of the Supreme
 Court of the U. States who was
 at Baltimore, appeared in the
 Hall, in pursuance of an invi-
 tation of the Convention, and
 took a seat to attend the delib-
 erations. Several Reports of
 Committees were made of a
 most important nature, among
 which was one ^{by B. L. Hallett} on the Masonic
 constitution of Masonic Orders
 or Parallels: another by the
 President John C. Spenser, con-
 taining the History of the Judged

proceedings had in the State of New-York to discover and punish the offenders concerned in the kidnapping and murder of William Morgan.

The Hon. William Wirt of Baltimore was present during the reading of ~~some~~ the above mentioned Reports.

Wednesday 28. The Convention met according to adjournment, at 9 o'clock A.M. and proceeded to ballot for candidates of President and Vice President of the U.S; and of 111 votes William Wirt had 108 for Presidential Candidate; and Amos Ellmaker of Pennsylvania 108, out of 110 for candidate for Vice President.

The two gentlemen accepted the nomination, by Letters communicated to the Convention. The Convention continued in session, performed much other business of high importance and late in the evening ~~and~~ adjourned sine die.

For a particular account of the

proceedings of the Convention,
and full Reports of the Committee
and other papers, see the pam-
phlet Stenotyped and published
at Boston by a Committee, 1832.

In the course of proceeding many
able speeches were delivered ~~by many~~
and it is to be regretted that they have
not been preserved and given to the pub-
lic as ~~an~~ ^{true} exposition of the
evils of masonry.

Previous to the meeting of the
Convention, the Lecturers of Balti-
more were generally much in
the dark respecting the abduction
and murder of Capt. Mangas
even the person Mr West
was but little informed on the
subject. Finding the papers
he pursued silent ~~on the subject~~
or rather disposed to ridicule the
proceeding of anti-masons and
defence the institution of masonry
he could not conceive that it

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was fraught with the evils imputed
it by those who had examined its
principles and practices. In his
letter to the Convention he says, "I
had heard, indeed, the general rumour
that Morgan had been kidnapped, and
~~was~~ very probably murdered by masons, for
divulging their secrets: but I supposed
it to be the act of a few ignorant &
sensitive disbelievers, moved by their
own impulse singly, without the sanction
or knowledge of the Lodge: and thus think-
ing, I have repeatedly and continually
both in conversation and letters of
friendship spoken of masonry and
antimasonry as a fit subject for
free and tranquil, and have been
grieved at seeing some of my friends
involved in what appeared to me such
a wild and bitter and unjust perse-
cution against so harmless an institu-
tion as freemasonry" and he adds,
"It was not until the period of your
assembling here, that on the occasion

of a friendly visit from one of your members, and my taking the liberty to rally him on the excessive zeal which had been excited on an occasion so inadequate, that he placed before me a detail of some of the proceedings on the trials of the conspirators against Monagan; when for the first time I saw the masonic oaths established by the testimony both of adhering and seceding masons on the trials in New-York.

Thus by a fair and calm examination of the documents which had been established for truth, Mr Wirt was struck with deep conviction of the turpitude of masonry, and had the honesty to avow his conviction in full. "I say he, this is masonry, as according to this uncontradicted evidence, it seems to be, I have no hesitation in saying, that I consider it at war with the fundamental principles of the social compact, as treason against

secrecy, and a wicked conspiracy against
the laws of God and man, who might
be put down". yet, strange as it is,

~~There~~ there are men of high talents
who remain under the same blindness
described by Mr Wirt, but have not
the firmness of character he possessed,
to examine the truth for themselves. To
such we say, you may persist in your
obstinacy and reap the fruits which
must follow; but we will have no
participation in your inconsistency.
There are men however at this time,
who regard purity of character, and
publicly uphold the principles
of the masonic institution. But many
remain silent, and thus give their aid
in perpetuating what their good
sense would condemn in any other
institution. We cannot but be dissi-
mular, or strolling in community.

During the sitting of the Convention
the ^{members} of Baltimore indulged in
no severe aspersions; but treated us

in with a degree of candor to which
 we had not been habituated in other
 places; some of which ^{indeed} expressed their
 surprise that so respectable a man as
 Mr. Wirt, should consent to be held
 up by such a party, as the antima-
 sons. The names that have since
 appeared in our ranks, have signed
 the severe vituperations which ^{afford} were
 common in most of the papers, and
 produced a better feeling towards
 us; and the only danger to our
 cause is that the outrages of men
 may be forgotten by the rising gene-
 ration, and thereby ^{be} suffered to ^{be} ^{re-imputed} to us
 and again depicted upon the rights of the people.

During my stay in Baltimore I have
 much examined parts of the city, but
 want of time prevented me from
 giving it a thorough search. ~~but~~ I
 since satisfy me that it is a place
 of ^{great} business and enterprise, and I am
 favorably impressed towards the
 citizens who appear generally to

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proper commendable habits and
intelligent minds. A more minute
circumstance might have given a
different impression. The Washington
and Scott monuments, evince that
they possess public spirit, though I think
they would have shown a better
taste had the former been less elevated;
The latter is very beautiful and com-
bines elegance with durability; it is
intended to commemorate the man
who fell in the action with the British
army in the late invasion under Gen.
Ross. - as we have many descriptions
of the city minute notices are here
unnecessary.

Thursday 29 Left Baltimore in
a steamboat, and followed our
former route, to Philadelphia, and took
quarters at Congress Hall in - 1st street
north of Chestnut street.

Friday 30. Spent the day in
Philadelphia in visiting various parts
of the City, some of which I found

much improved since 1790, at which time I was in the place several days with a friend from Deerfield. Owing to a lameness from an old fracture of leg my rambles were limited to Chiswick, and a few adjacent streets. The buildings appeared more elegant since the streets more ornamented than at the time of my former visit, and they ~~were~~ are carried out to greater lengths in various directions. The same regularity still prevails, and I could not but notice the spacious side walks and ornamental trees seen in various parts. The long market building, in the street of that name, had much of its former appearance, and though devoid of elegance, appeared well stocked with every article of use and comfort. I visited some of the most noted Bookstores to find rare publications. Book printing is carried

on extensively in the City and works of almost every kind may be purchased at reasonable rates. In passing along the streets I noticed a remarkable calmness, much more expressed little of the bustle we find in New-York and Boston. Something of this is seen at Steam boat wharves on the arrival of the boats, where there is necessarily a press of business. At the time of my former ~~visit~~^{visit} steam navigation was unknown ^{though} some attempts had been made to introduce it. I recollect to have seen ^{an} ~~Rumsey's~~^{Hitchcock's} boat here, worked by steam cutting air screws placed in the stern; but the plan failed of success, and was given up, until Fulton constructed his boat at New-York; since which they have been put in successful operation in most parts of the civilized world; since the prediction of Dr. Darwin is fully verified -

"Soon shall they arm, unconquer'd steam! apace

"Drag the slow barge, or drive the rapid barge."

among the recent improvements of the City, the water works at Greenmount for supplying it with water may be mentioned. The water is raised from the Schuylkill by machinery into reservoirs, and thence ^{conveyed} in tubes to all parts of the City, affording comfort and health to the inhabitants.

Philadelphia, in short, is an elegant City, and none I to select one for my residence, ~~more than~~ ^{one} I have seen, is more inviting.

Saturday Oct 1. Left Philadelphia and proceeded to New-York in company of several of my Brethren of the Convention, and took quarters at the American Hotel in Broadway. On the passage through Jersey we passed a place a few miles eastward from Princeton called Rocky-Hill, the encampment of Gen. Washington's Army at the time he issued his famous orders, at the close of the war. This I have passed on my outward tour.

without knowing it to be the place pointed
out to me on my return: the hill is not
remarkable for elevation, but abounds
in detached rocks, and presents open
fields; ^{but} no houses were on the road.

The following are the closing words
of the General's farewell, at this place
on 2^d 1783. "And being now to conclude
these his last public orders, to take his
ultimate leave, in a short time, of the mili-
tary character, and to bid a final adieu to
the command he has so long had the honor
to command, he can only again offer
in their behalf his recommendations to
their grateful country, and his prayers to
the God of armies. - May ample justice be
done them here, and may the choicest of
Heaven's favors, both here and hereafter,
attend those, who, under the living au-
spices, have secured innumerable blessings
for others! With these wishes and this
benediction, the commander in chief is
about to retire from service. - The cir-
cumstances of separation will soon be drawn

once the military scene to him. Will
be closed forever!— This must have
been an interesting scene, long remembered
by the officers and soldiers of the army;
and in passing over the ground I
could not avoid reflecting on ~~the~~
^{it,} ~~scene~~, though not of the army.

In the evening several of our anti-
masonic friends of New York who had
attended the convention as Delegates
called at our quarters, among whom
were Henry D Ward and Henry Cothe-
rel. Two of my companions were William
Spurgeon and Walter Paine Jr of Rhode
Island, genuine Unitarians, who
had been very active in the cause.

Sunday 2. attended meeting with
Mr Ward;— sermon by Mr. Woodbridge
formerly minister of Haddam, in which
he attempted to reconcile the goodness
of God with his creation of evil; a
proposition generally deemed
difficult. That God creates evil is, in my mind,
a doubtful position.
The day very fine the tide works

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of Broadway were thronged with
people of all descriptions, among them
I noticed many blacks, male and female,
generally well dressed, and some of
them most elegantly so, with watches
in their pockets and fashionable walking
canes, appearing to enjoy freedom and
civil life, not less than the whites.

How does such a sight ~~appear~~ ^{strike} us from
a southern slaveholder? These blacks
I am informed, are generally industrious
and procure a comfortable living in
the city. Are they in fact an inferior
race of beings, incapable of self manage-
ment and self government. Let them
be educated and elevated from their
depressed state - let them partake of
the rights guaranteed by our free con-
stitutions, once the question of their
capability would soon be solved.

But our southern brethren are not
willing to make the experiment.

Broadway I think is the most ele-
gant part of the city; in front of our

Hotel is the same as heretofore opening
 with grand walks. once the Battery
 and the southern extremity presents
 a similar appearance, both fine
 promenades, the latter much fre-
 quented. The City is much enlarged
 since my visit to it in 1790, especially
 on the northern part. At that time
 very few buildings were seen in the
 northeasterly quarter beyond what
 was called the manhattan wall.
 now the City extends ~~much~~^{far} to the
 north of it, and many elevated hills
 are levelled and their sites covered
 with buildings. As a place of man-
 ufacture business New-York undoubt-
 edly exceeds any other City within the
 United States, and probably will at length
 equal in magnitude London and
 Paris. But why are people so
 much disposed to immerse them-
 selves within the narrow streets &
 ponderous walls of our Cities? To
 me our Country villages present

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with

chambers, ~~however~~ not to be feared in
the continuous ~~months~~ ^{months} and gigantic edifices
of our prosperous ~~affairs~~

Monday 3. Being ~~chairman of meeting~~ ^{chairman of meeting} the
antislavery Committee, ^{presently in} to assemble at
Boston this week, I resolved to proceed
to that place by the route of Rhode Island.
Calling at the Wards printing office, I found
a number of our antislavery friends, among
whom was Miran Holley of Lyons in the
State of New-York, once several of the dele-
gation from Boston. Mr Holley is well
known as an elegant writer and has
rendered much service to our cause, by
his able addresses delivered in that State;
The address to the people of the United States
circulated at the Convention at Balti-
more, was written by this gentleman and
is an able document. Mr Ward is the
able author of several antislavery works
as well as the antislavery Register, pub-
lished in monthly numbers at New-
York. He is a seceding mason was elevated
to the third degree, and condemns the

system of masonry as anti Christian, anti Republican and fraught with tremendous evils in our country. He is a gentleman of science and literature and has been one of the faculty of a college in Ohio. Most of his works are in my family Library.

At 4 o'clock I went on board of the Steam boat Boston for Providence Rhode Island and sailed from New York with a load of passengers.

Once more locomotive, our boat soon gains its speed; the various points on either shore and the great City recede with the rapidity of a tornado.

The narrow gap of Hell Gate appears like a river just ahead. See the master at the wheel, for he trusts ^{his} ~~his~~ ^{own} ~~own~~ ^{skill} ~~skill~~ ^{for} ~~for~~ ^{himself} ~~himself~~ ^{at this point} a small motion to starboard, then to ~~starboard~~ ^{starboard} once the obedient boat in ~~easy gliding~~ ^{quick gyrations} glides along, shunning every danger at the will of the master like a well broken horse; and within a few minutes we are in Long Island

sound gliding triumphantly along the
 smooth surface of the water. Thus the skill
 of man by his knowledge of the laws of
 nature, triumphs over difficulties which
 the savage finds insurmountable. So had
 perfect future generations may arrive
 none can tell? Had our ^{large} Fathers who
 so long "truggled at the oar", and turned the
 sails to the wind, been told that their sons
 by the aid of fire and water, would
 navigate rivers and bays with scarcely
 the exertion of rowing, they would have
 smiled at the prediction as the visionary
 ravings of a visionary enthusiast.

Our view of the adjacent shores was
 short, for night soon enveloped us and
 the compass and distant light houses
 were our ~~only~~ guides. The wind being
 gentle, little ~~undulation~~ of the
 boat was felt, and we anticipated a
 pleasant voyage. many of the passen-
 gers retired to the berths, while others
 remained on deck busily engaged in
 conversation on various subjects suited

to their tastes. The night being clear
and our horizon ~~extending~~ ^{uninterrupted} nearly
to a hemisphere, I amused myself with
a view of the constellations and known
stars. Now and then a distant
light house appeared. If a head we
soon brought ^{it} to beam on our beam;
if not seen, ~~on the~~ beam, we in a short
time sunk it below the horizon.

~~When~~ The sparks from the flue of
the engine ^{attracted my notice when they} were large it was pleasing
to notice their course through the
air and ~~then~~ close to the sur-
face of the water, where they ~~seem-~~
~~ingly~~ seemed to rest sometime be-
fore they were extinguished. *

Amused at length with observation
and the air becoming cool, I retired
to a berth, where the stillness which
prevailed, from the peaceful regula-
tion of the of the ~~motion of the~~ boat,
invited to sleep. A few of the passengers
having commenced a game at cards, to repose
I awaited the dawn of day. I found

* See note at the close.

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inconsiderable undulation of the boat,
and an enquiry was informed, we were
off point Judith, where the waves from
the ocean rolled ⁱⁿ towards the land, un-
obstructed.

at 5 o'clock in the morning we arrived
off Newport, and sent part of our pas-
sengers on shore; but owing to the
darkness I had but an imperfect
view of the place, which I much regretted.

Tuesday 4. our boat had not pro-
ceeded far up the bay, before a heavy
fog induced our cautious master to
come to anchor, to avoid some dangerous
points or rocks, where we remained
until the fog cleared away. The anchor
was at length weighed and in a few
sore under our former speed and ^{in a short} ~~time~~
time arrived at Providence and put in
with our shore Island delegates.

The whole distance from New
York to Providence is estimated at
184 miles; and the time to Newport
(150 miles) ^{was} 13 hours. What a triumph of Art!

At Providence we found Curriers ready for our passage to Boston & ~~we~~ we immediately scuted, with out a minutes time for examining the place. I could not but regret such haste, ~~which~~ was a severe tax on my curiosity, and any remarks on the place, other than that it appeared very dry and flammable would be improper.

The distance from the City to Boston is about 40 miles, over a country the soil which is not the most fertile, until we approach Boston, where good husbandry has much improved it. We arrived at Boston a little past noon and found our Antislavery Committee assembled for the purpose of nominating candidates for the office of Governor & Governor. John Adams and Mr Winthrop were nominated as the candidates for Governor.

Wednesday 5 The Committee assembled at Merchants Hall and received a Letter from Mr. Adams, declining the nomination - being unwilling to be held up in opposition to Mr. Lincoln.

The ballots for another nomination being collected and counted, Samuel Lathrop of West Springfield was found to be chosen candidate for Governor, and I was appointed to convey the nomination to this to ~~the~~ ^{my} ~~state~~ ^{part} on my return to Deerfield.

Spent the ~~the~~ remainder of the day in Boston. Called at Mr. Paynes the astronomer, and examined the Instruments lately procured by the State for making our trigonometrical Survey. Among which is a Transit instrument, a Telescope and large theodolite, made in London - all appeared to be well constructed; the theodolite though a good instrument for ~~common~~ ^{accurate} surveying, I think, is not suitable for

nice geodesic operations, and has not been much used. An Instrument of another construction made, I believe, by the famous Troughton, by command of the U. States, admitting of several readings and repetitions of the observed angles, an invention of Borda, has been preferred by an Engineer.

Would it not be well for the State to procure a complete set of astronomical instruments, to be deposited in a suitable observatory in the care of a skillful astronomer, who should receive a moderate salary from the public chest? Such an establishment is much wanted, & would be ~~more~~ more honorable to the State than many of our presents for unimportant objects. But the necessity of such an establishment is not seen by the unscientific part of community.

at Dr Phelps I met a Dr Brown.

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of Medford. a Ray at brick mason
who acknowledged that masons had
killed Mangum and gave the "whole
hog" He condemns the institution
in all its parts.

Since visiting the city of Philadel-
phia, I ~~could not~~ but notice the irregu-
larity and contracted widths of the
streets of Boston. Had the city been
regularly laid out, for a large place,
at the commencement of the ~~city~~,
it would have been, not only more
elegant, but more convenient. Many
of its edifices are indeed as handsome
as those of Philadelphia; but the typel-
ical plan of the latter, will strike the
eye of the observer, as much more
beautiful than the former. The ~~beauty~~
peculiar of the streets belonging on the common,
~~one~~ not however, inferior to the most
elegant part of Philadelphia. In its
ground plan, New-York is as de-
fective as that of Boston; but as its
streets extend northward, they become

more regular, and present the ~~very~~
~~whole~~ aspect of Philadelphia. A view
 of our State house from the south, I
 think, is not excelled by any public
 building I have seen; and its elevated
 situation gives it an advantage
 over most others. Boston is fast
 improving by the addition of building
 and new streets, and must necessarily
 be, as it has been, a place of great
 business; the facilities afforded by
 the construction of Rail Roads in
 various directions, will invite the
 principal part of the trade of New-
 England to this great mart.

Thursday 6. remained with my
 connections in Boston, waiting for the
 papers to be communicated to Mr Lo-
 throp. The nomination of Mr West,
 at the Baltimore Convention, excites some
 surprise among those ^{here} who are deter-
 mined to remain blind to the errors
 and principles of masonry. Like
 him they have believed that the

institution was harmful; but ^{org}un-
like him they refuse to examine the
prospects turpitude and guilt.

Mr Wirt had incidentally heard the
"rumor" of the abduction and murder
of Morgan Lynns, and he supposed
it to be ^{the} the act of a few ignorant men
beers, without the sanction or know-
ledge of the lodge, and treated the
affair with indifference; but he was
not apprized of the fact, that ^{many} masons
who had sustained a fair standing
in the community, unequivocally jus-
tified the transaction, and aided
in screening the perpetrators from
punishment under the laws. Some
so astute, and who was in the constant
practice of reading the papers of the
city, could be thus kept in the dark
in relation to the said affair
is it strange that others of similar
characters and employment, should
be equally blinded? we do not
so much wonder at this blindness, as

~~and~~ at the criminal neglect
 to obtain information of the at-
 trocity. The apathy which so
 generally prevailed, on the first de-
 velopment of the transactions, con-
 vinces a recklessness wholly in con-
 sistent with the duty and watch-
 fulness necessary for sustaining re-
 publicanism; since he is entitled
 to fear in many, that our liberty
 rests on a basis less firm than
 they had heretofore supposed.
 We had looked to an intelligent
 man as guaranties to our rights,
 and he had supposed they would
 be the first to step forth to resist
~~the first~~ encroachments upon
 them. But when we saw them
 sleeping on their posts, or giving the
 cry of "all is well," instead of sounding the
 alarm on the perpetration of a mur-
 der by a powerful midnight
~~combination~~ combination, affiliated
 by horned oaths and bloody mud

two, honest men were alarmed, and
this alarm was increased when it
was seen that the criminal laws of
a neighbouring state were frustrated
and tampered in the court by this
same combination. Under this state
of things could our ~~land~~^{land} ~~people~~^{people} remain
indifferent? Alas! to the deep
disgrace of ^{these} republicans, this was
the astonishing fact.

To account for the conduct of these
men on consistent principles, would be
no easy task; but willing to accept
all that can be can decide, we will
mention a few circumstances in mit-
igation of their singular course.

Associations of working or stone ma-
sons were known in England as early
as Edward 3^d. and in 1350 an act of
the government was passed, regulating
their labour and wages and in 1424
another act was passed, making it
forbidden to hold their meetings. From this
time, it seems, the associations, ~~were~~
fell

~~men~~ fell into disrepute and were
 little known. Probably however,
 they continued to assemble in a pri-
 vate manner. About the year 1714, the
 Order was revived under a new
 name, called Speculative Freemasonry,
 consisting only of three degrees, but was
 not confined to masons or stone ma-
 sons, though the old emblems were
 continued. Well knowing the power
 of a secret body, many gentlemen
 joined the affiliated corps, and in
 the course of a few years lodges sprang
 up in various parts of Europe and
 the East Indies. In 1733 a lodge
 was established at Boston in this
 then Province of Massachusetts, and
 they have since extended over every part
 of the United States, even to almost
 every cluster of log houses on our fron-
 tiers. This brief history is introduced
 to show the decay of the primitive notions
 of the institution to great antiquity,
 as has been supposed by those who

have not examined its origin.

Though the progress of masonry was rather slow previous to our revolution and was mostly limited to three degrees, it has since made rapid progress and many deemed respectable men have become members; but let it be remarked, that in most instances they entered to belong at an early age, under the dazzling display of ~~their~~ glittering baubles, and empty pretensions to antiquity and sanctity. But perhaps nothing has so effectually blinded the public mind in regard to the design of the institution as the imitations of Genl. Washington and others of respectable standing in our country, into the fraternity. The Liberty Song that ~~these men~~ have been members of the institution, has been chanted in all corners of our country, and the conclusion drawn, that it must, therefore, be pure in its principles. But what ^{was} the masonry

of Washington, and many others of his
 colleagues? When ~~he~~ was initiated
 the system consisted only of three
 degrees, and they differed in many
 particulars from those which now
 exist; and that he held them in low
 estimation, is evident from his state-
 ment to the Rev. Mr. Snyder, in a letter
 dated August 25-1798, in which
 he says, "I reside over no lodge, nor
 have I been in one, more than once
 or twice within the last thirty years,
 computing back the date to 1763. If ~~he~~
^{he} ever ~~was~~ ^{had} an active member, it must have
 been during the French war of 1755,
 while connected with the British
 officers who served in this country.
 with the higher degrees since intro-
 duced, of French origin up to 50, or
 more, he was entirely ignorant;
 and this was the case with others
 of his time. Without an acquaintance
 with these facts, many on hearing the
 masonic song that "Washington was

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one of their brethren, embrace the opinion
that the institution cannot be corrupt
in its principles; and Mr. West after
having examined the oaths and
ceremonies, as they now exist, comes
to the conclusion, that this was not
the reasoning of Washington, and he
readily adopts his conclusion.
To other eminent men who have
ascended the ladder to the higher de-
grees, ^{and strive to it} we leave the difficult task of
reconciling their consistency with
duty and patriotism.

Another source of the delusion into
which many of our leading men have
been led, is the singular course pursued
by the press in this country. Relying
on this source for information on
important events, they found them
silent on the subject of Margens ab-
duction and murder; and were
the trials of the conspirators in
the State of New-York allowed
to appear in the columns of the

persons of the clergy. True indeed
 if at any time the ^{with} diligent of mason-
 ry suspect upon them, it was un-
 dermined with ridicule and vituperation;
 and without the aid of a
 few free presses which dared to
 speak the truth, little a nation
 would have been humbled by the
 people of the cotton cities committed
 by masons, or the efforts of one time
 to remove the bloody stain from
 our land, and restore the supremacy
 of the laws. Not other proofs have
 existing, this alone would have
 demonstrated the monstrous power
 of masonry over the public mind.

Another source of the elusion of
 our leading men was the party spirit
 which prevailed in the country, respecting
 the policy of our government, and the
 men who were to be raised to places of
 public trust and honor. Through
 the influence of masonry they were
 led to believe the contract with the
 public

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fraternity originated in a stripe for
office. This, though it indicated want
of discernment ^{inexplicable} ~~in~~ enlightened men, was
a fertile cause of the delusion. The excite-
ment got up when Capt White was
murdered at Salem, might with equal
propriety have been attributed to
similar motives, and the perpetrators
of the bloody scene ~~have~~ been suffered
to escape with impunity.

But all these considerations ~~can~~
weigh but a feather in mitigation
of the conduct of our hunters ^{clergy} ~~and~~
nativists. The History of the Jesuits
ought to have taught them, that
secret societies were liable to corrup-
tions. This society ~~was~~ originated with
men professing to be Christians, &
for a long time it was ~~xxx~~ viewed
by the public ^{as heavenly} ~~as~~ long the scheme
became of the most corrupt kind,
and several murders were undoubt-
edly committed by its members; but
even at that time there was virtue enough

in the governments of Europe to
 put them down and abolish the
 institution. Once it is saying no
 but a ~~repeated~~ ^{eloquently} compliment to say
 that we, in this "enlightened age",
 act with less energy. On the whole
 the conduct of the men to whom
 I have alluded, has been of such a
 suspicious nature as to shake the faith of
 the community in the rectitude of
 their intentions, and taught ~~them~~
 the truth of the adage, that great
men are not always wise. The
 impression on my mind is, that the
 Country possesses much less virtue &
 patriotism than I had supposed,
 and that the people may be led
 into errors which may prove destruc-
 tive to our rights and liberties.

The evidence which is now embodied
 in various publications, of the proof of
 the immolation principle of the masonic
 fraternity, & the knowledge of the
 high masonic ^{is officious} ~~journeys~~ ^{way} of many parts of

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the ^{have} ~~dis~~ ^{of} the designs against
Morgan, and little short of a monster
troop; and he who still doubts the facts
lacks common ^{discernment, or must} ~~be~~ be
with an obduracy, disgraceful in an
enlightened community. In the latter
case we leave ^{them to} the full enjoyment of
their inviolable situation.

Friday 7. Left Boston and pro-
ceeded to Springfield by the route of
Worcester and Brookfield, and in
the ^{evening} ~~morning~~ over to West Springfield, to
to communicate to Mr. Lathrop
his nomination for the office of
Governor, and unfortunately found
him absent on business in a distant
town. Left the papers with his
family, and returned to Springfield.

Saturday 8. Proceeded to Deerfield
and found my family as well
as usual.

Remarks & Reflections.
My tour was pleasant, and
gave me an opportunity to
review places I had ~~never~~ ^{never} passed

once in my younger days, and to
 view many others which I had not
 seen - viz Delaware Maryland
 and North Island. The Country
 appeared prosperous in ^{almost} every
 part; and if we trust ourselves -
 if we cherish and support our
 Constitution and the sequen-
 cy of the laws - foster the arts,
 sciences and ^{our} primary schools -
 preserve the Union of the States
 and avoid the corruptions con-
 tent to our grown riches, we may,
 under the blessings of God, become a
 great, prosperous and happy na-
 tion -

In my various tours, twixt my na-
 tive State, Massachusetts, I have visited
 Maine, New-Hampshire, Vermont, Rhode
 Island, New York, Ohio, Pennsylvania
 New Jersey Delaware and Maryland;
 also the British Provinces of New-
 Brunswick and Upper Canada;
 in all which I have found, respectable

people, and kind treatment. In four
-teen settlements I have found the greatest
variety of character, and those who
have took of the wildness of their woods;
but by conciliatory conduct, I have
always found them ready & willing
to bestow reasonable favours, and
in no instance been ill treated, even
when I have gently opposed their
prejudices or endeavored to correct their
errors. I have sometimes been con-
vinced of, why I had not become a
member of the masonic society, which
I was assured would be of great
benefit in travelling. My error has
been, that I could see no inconve-
nient in this step, until its principles
were explained to me; that if it
contained any thing useful to me
it should not be kept secret; that
if it involved the arts and sciences,
as was sometimes pretended, I had
already run up to them, without coming
under the obligation of secrecy. The

source of the tyber at the door of
the lodge; its pretensions to profound
wisdom which must be kept under
the veil - the violence exhibited by
its members when ~~it~~ the purity
of its principles are called in ques-
tion; its windy titles and claims to
contiguity, embracing the solomons,
Mirems and Johns of scripture; -
its display of trinkets, that a well
informed savage would blush to wear; -
the little science and literature of
many of its members, and the indiffer-
ence with which the more informed
ones seem to treat it - and the asperity
with which it assailed ^{by} Docteur Robur
Sarr, ~~and~~ ^{and} ~~Blaise~~ ^{Blaise} & others for their attack
on Illumination; all these, and
many others that might be mentioned,
have raised my suspicions of the
purity of masonry, and kept me
from a desire to be initiated into
its secret mysteries.

The bubble has at length burst.

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its immortal ashes are laid open,
and instead of any thing useful ~~there~~,
it is found to be filled with "black
men's bones", and its principles and
ceremonies fraught with all the evils
imputed to it, by its most suspi-
cious opposers. Let it sink to contempt-
ing contempt, and no more prevail
upon the rights of an honest, and
unsuspecting community.

Note A. (See page 82)

The application of the Steam Engine
to navigation is a wonderful im-
provement, and now affords fa-
cilities for transportation on our rivers
and the coasts of the sea-coast, the
advantages of which can hardly
be calculated. Though liable to
fatal accidents by the bursting of
its boilers, it is believed that by im-
provement these will become less
frequent, if not entirely removed.
The great importance will induce

our mechanical philosophers to ^{try} every
 invention to remedy this difficulty &
 when it shall be effected they will
 add much to the value of the engine.
 In its present state, ^{with} good management
 care, considerable safety has been
 attained. The boat in which we ~~are~~
 made ^{our passage} ^{the pretty sound} I am informed
 has at no time met with an acci-
 dent of a serious nature. Much no
 doubt is due to the master, who is
 said to be a careful manager; and
 no other ought to be employed, where
 the lives of so many people are con-
 cerned. The horror attending an ex-
 plosion can hardly be described or con-
 ceived; it is not less fatal than the
 discharge of a magazine of ^{gun} powder
 from a mine in the attack of a
 fortification where a large body
 is engaged, and perhaps in some
 instances, is more destructive. The
 liability of ^{the} present boat cannot
 but abate the pleasure of a voyage,

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in all who are conscious of the danger; yet hundreds of passengers on every boat, seem to be as much unconcerned as if they were passing over a smooth road, in a carriage to which they have long been accustomed. This is the nature of man, and perhaps it is well that it is so. A more cautious disposition might prevent a considerable spirit of adventure, which has its advantages. Had Columbus possessed this cautious disposition, America might have remained undiscovered ~~until~~ a much later period; and with the same disposition our adventurous circumnavigators would not have discovered the numerous Islands of Polynesia & brought our Geography to its present perfection. But if these considerations will stimulate us more to adventurous exploits, they will hardly render us more willing to be scattered to death or blown into cottons by the explosion of steam-boats.

The use of steam in navigation is
 the result of a language of the engine
 in Europe. So long ago as 1663 it is
 said the Maryn of Worcester constructed
 an imperfect engine of this kind; but it
 is to modern times we are indebted
 to its application to the arts. In its
 early use, it was worked ^{by} expansion of
 the steam and atmospheric pressure;
 but at length what is called high
pressure engines, were brought into
 use; in these the elastic force of the
 steam works the engine without the
 aid of atmospheric pressure. but it
 was some time after this invention
 that it was so improved as to give
 a rotatory motion. To Mr Savory New-
 comen, & ^{Boulton} ~~and~~ Watt, we ^{are} indebted
 for many improvements in the steam-
 engine; but ~~it was some time before~~ ^{it was some time before} the
 latter introduced the rotatory motion.
 In 1770 Mr Wark bought of Bristol
 in England, took out a patent for
 an engine which included this

improvement
~~improvement~~; since which others
 have introduced improvements which
 have brought the engine to consid-
 erable perfection. But it ^{was} left to our
 countryman Fulton to apply this
 power to Navigation, and the
 first successful experiment was
 made by him on the Hudson, in
 1807. His boat called the Clermont
 ran up the river from the City of
 New York to Albany, a distance of 150
 miles, within 32 hours, and back
 in 30, in both trips against a light
 breeze, a velocity much less than
 that ^{of the} recently constructed boats ~~before~~.

The first appearance of this boat on
 the river, excited much surprise;
 To some who ~~saw~~ heard indistinctly
 seen her passing in the night (says the
 Colonel) she appeared as a monster
 moving on the waters, defying the
 winds and tides, and breathing flames
 and smoke (See his "Life of Fulton")
 not a very inapt simile. The

The invention has, at this time, extended to most parts of the sea-
side world, and recently one of
these boats, has been put in opera-
tion on the Demule, in the Turkish
Dominions.

In an address delivered before
the New-York Historical Society by
Governor Morris, in 1816, alluding
to Fulton and his associate Savin-
ton and their ~~invention~~ ^{invention}, he said:
"This invention is spreading fast
in the civilized world; and though
excluded from Russia, will ere
long, be extended to that vast em-
pire. A bird hatchet on the Hud-
son will soon people the shores
of the Volga, and cygnets descend
from our luminous Swan glide
ed on the surface of the Caspian
Sea. Then the hoary genius of
Asia, high throned on the peaks
of Caucasus, his moist eye glisten-
ing while it glances over the

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ruins of Babylon, Persopolis, Jerusalem, and Palmyra shall bow with ~~the~~ grateful reverence to the inventive spirit of this western world."

15 The Cultivator: a Monthly Publication devoted to Agriculture, by the New-York Agricultural Society, conducted by J. Paul; terms 50 cents per annum, paid in advance, each No. 16 pages, from the Steam Press of Parker & Son, Bartholomew, Albany.

We have purchased a few numbers of this work, of the 3^d Vol. and think it very valuable, not only for farmers, but for all others who are friends of improvement.

Amongst the useful matter we have noticed in the primers, the recommendations, in the 5th, of the 3^d Vol. respecting the planting of trees, an old farm and Pearis, and the cultivation of Beets for Sugar, are

important. In all old countries the want of timber not only for building but for fuel, is a serious evil, and though our Country, at present, does not feel the inconvenience, in a high degree, the time is not distant when we shall be in want of this article; and where coal is not found, as in New England, the difficulty of procuring fuel will be great. If it can be supplied from the abundant coal beds of Pennsylvania and other distant places, the price will necessarily be great, and beyond the abilities of the poor. By planting trees extensively on our old fields, the difficulty will in a great degree be obviated. This is now extensively practised in England, and the article to which we have alluded, (in the 3^d number of the cultivator) states, that in 27 years the Duke of Bedford alone, had planted

upon his estate, 1540 acres of ground
~~with~~ 5,735,000 trees, exclusive of 600 bush-
 els of acorns and other seeds, put in
 with the dibble. On the Precious of the
 west this planting of trees is recommended,
 as one of the first objects that should
 engage the attention of the settler.

In New England where stone is
 plenty, and bricks may be ^{made} ~~factured~~
 to great extent, these articles will pro-
 bably be substituted for timber;
 yet this will still be necessary, in
 all edifices, as well as for fuel, and its
 importance in ship-building is obvi-
 ous.

The manufacture of sugar from
 beets, I think, deserves attention. This
 article has in fact become a necessa-
 ry one; and the increasing demand
 for it, both in Europe and America,
 renders an increase of it necessary, as
 the supply from the West Indies will
 at length be found insufficient.

In France this manufacture is rare,

it appears, carried on to considerable extent, and it is said samples of the sugar are seen in that country, equal to the finest loaf, at 9 cents per pound. The process may be found detailed in Chaptal's "Chemistry applied to agriculture".

Beets may be cultivated to any extent, on our alluvial soils, and others well manured; and I see not why a supply of sugar may not be obtained, equal to the wants of our people. I think has been said of late concerning the raising of silk, and encouragement for this purpose is held out by our Legislature, by the grant of premiums. But as this article is in fact a superfluity, which I think cannot be justly said of sugar, it appears that encouragement for manufacturing it from Beets, is of much greater importance, than that for the manufacture of silk.

To Mr Thomas G. Jessenlin, who has

for several years afforded a most valuable publication, the New England Farmer, having his press in Boston similar to the Cultivator, the public are greatly indebted - a comparison of the ^{myriads of} ~~the~~ ^{and} works might be deemed invincible; both are excellent and deserve the patronage of the public. The former may be had in bound volumes, and ought to be in the hands of all intelligent farmers. The latter, I am informed, may be had in the same form, and should be on the shelf with the Farmer.

16. Fourth of July Anniversary.

This has been celebrated in several of the towns in Massachusetts this year, - addresses delivered and numerous toasts given. To these we have no objection, provided they are intended to keep alive a true spirit of liberty. But it may be remarked that this is not always the case.

When political parties are formed,
they generally make use of this am-
usement to further their views;
and they are not always criteria
by which we can judge of public
feeling. The grandeur and show.
attending them, no doubt, has an
effect, since this may be right
or wrong according to the intention
of the leaders. When the people
are falling into an apathy, or too
much absorbed in pursuits which
tend to render them blind to their
welfare, they may be useful to
raise the unthinking to a sense of
the importance of their privileges.
But the stimulus thus created, is gen-
erally of short duration, and lasts only
for an election or two. ^{If that is the} ~~The~~ people do
not continue to act vigorously in any case
where pecuniary advantage is not the
result; and here we may be in
danger of becoming careless to the
~~great loss~~ ^{vigilance} ~~of our~~ ^{country}, ~~land~~ ^{and} necessity in

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republican governments. In the recent
assemblies of the people, exertions have
been made to renounce the Jackson system
of policy & procedure, and to change the
election system in Massachusetts. Complaints
were made against Gov. Everett for some
appointments he has made, particularly
by Antimasons, and the Jackson party
seize on this, to enlist them into their
ranks, probably without much sym-
pathy for their cause. Many of this
party are masons, or those who have
supported masonry, and from them
no great aid is to be expected. Let anti-
masons then, act with caution, and
not suffer themselves to be misled by
sentences outfully concealed. As respect
some of the appointments made by
Gov. Everett. I have been a little slanting,
but perhaps the influence of the power
placed over him by the Legislature.
I mean the Council, may explain his
conduct, without the supposition that
he has abandoned his antimasonic

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principles, so freely developed before his election.
One circumstance, it must be admitted,
bears an unfavorable aspect: his appoint-
ments have been such as to meet the
~~active~~ ^{active} opposition of some of the most
inveterate evil-doing masons in Boston,
who, previous to his elevation to the
office of Governor, were his violent
opponents, and denounced him with
severe vituperations. I shall, however,
be slow in embracing the opinion
that he has become an enemy to
Anti-masonry.

Among the toasts given, I notice sev-
eral touching the militia which in-
dicate little knowledge of the sub-
ject. In the Weymouth celebration
the following is found in the list of
the regular toasts.

" 12. The militia: citizen soldiers; the only
safe defenders of a Republic: he who
would disarm such a soldiery, thereby
making a large standing army neces-
sary, only paves the way for military

chopstism". The importance of a militia in our republic, we all acknowledge, but differ about the form. Those only who are for continuing the old inefficient system of training the whole of the enrolled men, are in my opinion the real enemies of a militia though they may not know it.

At the Democratic celebration at Boston we find the following.

"The militia - courted and pursued in time of danger - neglected and ridiculed when it is over"

By whom is the militia courted in time of danger? not by experienced officers; they well know their inefficiency. Not by Washington, who after a trial of them in the field, said "I solemnly declare I never saw with us, to a single instance that can countenance an opinion of militia or raw troops, being fit for the business of fighting (See his Letter to the Governors of the States, page 18) If it is "neglected & ridiculed", it is by those

who have witnessed its falacy by
 long observation, and are endeavor-
 ing to remodel it and direct it
 of its "cumbrous machinery", which
 Secretary Cass says, "creates expense and
 trouble, and which while it ~~costs~~
 performs little, performs still less"
 (See page 23.)

The Milford celebration ~~at the~~
~~place~~ presents the following among
 the regular toasts.

"The militia - Forgotten by Congress;
 neglected by the State Legislatures; dis-
 couraged by the public opinion. It
 owes its existence to the public spirit
 of its friends."

The forgetfulness of Congress cannot be
 too severely censured; to them belongs
 the power and duty of organizing
 arming and providing for the discipline
 of the militia, and their neg-
 lect is astonishing. At the late session
 a Bill was introduced, imperfect
 indeed, but something done, and

until that body shall know a better system, it is in vain for the states to attempt an efficient ~~one~~. The "neglect" of the states is an unjust charge. In Massachusetts this is far from the case. While relieving the militia from the useless perambles of Regiments, its Legislature has provided, — encouragement to the light corps, by a reasonable compensation for their services; ~~of the light corps~~ ^{which is the best} and when this plan shall be carried out, and the men trained in the field a number of days annually, and ^{which is the best} ~~subsidized~~ ^{by} the government, an efficient force will be prepared; and all that can be done by the state will be performed.

If the militia ever was respectable, it owed that quality to the "public spirit of its friends", and not to the government, and this alone carried death into the system, and will for the future, if persisted in, forever render it of little value.

at

at the Seituate celebration we find
this toast in its regular list.

9. The militia. The only safe guard to
republican governments. When rendered
unpropitious by popular frenzy, a
standing army will supply its
place and avert the chains of des-
potism."

Kindly, as I am to a militia, I shall sup-
pose that it was not the only safe guard
to our republic; and as it appears to me
is one of the ingredients, needed to a small
standing force for garrison duties.

But if a militia is the real "safe guard"
of a republic, let me say to the gentle-
men met at Seituate, that they can-
not ^{consistently} withstand those immediate and
in establishing a system which shall
preclude a standing army; and that if
it is their design to continue the former
one, which was superseded by individual
real instead of government action, and
has become unpropitious from the expe-
rience of ^{the} insubordination, then include me

maybe chosen to the necessity of a stimulating
 enemy. The remedy, ^{as I have often suggested} is easy and obvious
 to all who will examine the subject.
 Let Congress adopt a plan that shall
 arm all able bodied men of a suitable
 age, come from these farms on elite
corps of say 100,000, which shall be prop-
 erly organized, trained in the field curri-
 cularly in small bodies, a sufficient number
 of days to give them instruction in com-
 pletes, and paid and subsisted by gov-
 ernment; then we shall be prepared
 for any emergency, and no longer be
 smiled at ~~for our~~ by the nations of
 Europe, for our boasts and "propaganda
 frenzy" concerning our national de-
 fence. We may continue our old sys-
 tem and rest in armed security, and thus
 invite the cupidity of the nations of Europe;
 but rely on it, ~~that~~ the tug of war with
 any ^{powerful} ~~great~~ military nation, would ex-
 pose of our present insanity, and open
 our eyes to our danger.

14 Death of Solomon Williams.

July 26th 1836.

Mr. Williams was the last of the family of Dr. Thomas Williams of this town, and was a respectable inhabitant.

He was an industrious farmer, and well educated for one of his profession, and not below his brothers in point of natural talent, all of whom have been respectable. His reading was extensive, particularly in modern History. Bred in the old school he was not enthusiastically fond of all the new schemes of modern times, and doubted the utility of some which came, by many, supposed to be improvements. His discernment and judgment on subjects to which he had attended, were sound and discriminating; and all liberal men who knew him held him in esteem. He had for some time the eye of years, and left a respectable family of 6 sons, and a wife.

Magnet: a singular Fact reported.

In a German periodical publication for 1797, it is said that a person having an artificial magnet suspended it from a wall of his study, with a piece of iron adhering to it, remarked, for several years, that the flies in the room, though they frequently placed themselves on other iron articles, never settled upon the artificial magnet. Cavallio's Philosophy 2 Vol 286 p.

On trying the experiment with a horse shoe magnet, I find that our american house flies show no aversion to resting on the magnet whenever it comes in their way, even on the points of maximum attraction and repulsion. Had the German experiment proved correct, we might have supposed the body of the fly to be ferruginous and attracted by the magnet like such bodies. But in that case the fly would be attracted to the magnet rather than repelled. Animal magnetism then has no effect on the fly. - Germany, it has been said

is fertile in mysticism, and thence
 Animal magnetism, we are informed
 had its exponents. ~~Some time~~ ^{Some time} after ~~the~~
~~time~~ Mesmer's system was scouted
 from France. The person who no-
 ticed the effect of the magnet, ^{on files} as men-
 tioned by Cavalli, probably was a
 convert to the putrid science. Mes-
 mer was German and he commenced
 his fanatical theory there, ~~about~~ ⁱⁿ
 1777 or 1778 about the time the
 German noticed the phenomenon of
 the files. Some efforts, it is said,
 are now making to revive animal
 magnetism in this country. We hear
 of its wonders in a Boston publication
 of recent date. With Phrenology it may
 amuse us for a short time and then
 disappear, & give place for something equally
 absurd.

- "Developments, thus manufactured
- "Conceal many a truth shut to be fractured,
- "But pity ever deserves defiance
- "When ever she thwarts the march of Science."

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Burnetts Geography of the Heavens.

Mr Lincoln the President of our Academy put this work into my hands for examination, and I have perused with great satisfaction. It consists of eight well engraved plates with an accompanying Vol 12mo. 3^d edition Hartford 1836. It is superior to Green's Astronomical Recollections, though somewhat similar in its plan.

Mr Burnett's plates are so contrived as to point out the time when any star culminates, and a considerable number of Constellations are found on each plate, two of which show the circumference, and from others, the stars between them. The 4th is a delineation of the Heavens on the principle of Mercator's projection, in which the manstars are represented by dotted ^{stars} ~~lines~~. The 1st plate contains a plan of the Solar System upon a large scale, with the inclination of the planets orbits and their relative sizes &c. in a very perspicuous manner. The plates are perhaps as convenient as

a celestial Globe.

Part 2^d of the Book contains a short treatise of Astronomy, including not only descriptive, but many useful problems in its practice, and several useful tables. The work contains an Introduction written & supplied for ~~the work~~ by Dr. Dick of Scotland. who it seems had perused some of the former editions.

The Book begins with the Constellation of Andromeda containing 66 visible stars of the 2^d and 3^d magnitude, one of which is named alpheratz. This star's position should be well fixed in the memory, says Mr. Burriett, because it is but 1 minute west of the great equinoctial column or first meridian of the heavens, and forms nearly a right line with algenib, the wing of Pegasus, 14° S. of it, and Beta in Cassiopeia, 30° N. of it. If a line connecting these 3 Stars, be produced, it will terminate in the pole. These 3 circles, in connexion with the north pole

pole star point out to astronomers, the position of the great circle in the Heavens from which the Right Ascension of all the heavenly bodies is measured.

Caph, or beta, in Cassiopeia, is almost exactly in the equinoctial colure, 30° N. of Alpheratz, with which and the north pole star, it forms a straight line.

Caph is on the meridian the 10th of ~~Sept~~ November. It is the western star of the bright cluster.

Schedir, or alpha in the heart, is the upper star of the 5 bright ones, and 5° S.E. of Caph: the other 3 bright stars, forming the chair, are easily distinguished, as they meet the eye at the first glance.

Caph is used in connexion with observations on the pole star, for determining the Lat. and variation of the needle.

This star is in the colure which passes through the vernal equinox, and Micrag, in Orion Major, is in that which passes through the autumnal equinox. Caph and Micrag are almost opposite to each other, or on opposite sides of the N. pole and equally

* Nor are the names of the Stars much less so

Perseus, in the southern sky, is pronounced Per-see-lo.

The constellation Bootes is pronounced Bo-o'-tee, by M. Burritt.

distant from it. In my observations for ascertaining the variation of the needle, by circum-polar stars, I have used Arcturus in Bootes, and Gamma in Capricornus; but three, or any two circum-polar stars, whose R.A. differ 180° , will culminate when on a line perpendicular to the horizon.

The uncouth figures with which the ancients have marked out the heavens, appear to me to be rude, barbarous and perplexing. Sir John Herschel says - "The constellations seem to have been almost purposely named and delineated to cause as much confusion and inconvenience as possible. Innumerable snakes twine through large and contracted areas of the heavens, whose nomenclature can follow them; bears, lions and fishes, large and small, northern & southern, confuse all nomenclature &c. A better system of constellations might have been a mutual help as an artificial memory." But the system having

obtained a currency, like most old things,
it is difficult to set it wholly aside.

I think however, that some of the tails of
the snakes might be cut off, and the stars
in them annexed to contiguous constellations.
Take for instance, the Hydra, whose head
includes stars about 8 hours of R.A. & the
tail of nearly 15 hours = 105 degrees, and
who can readily point out such
stars as belonging to this constellation.
Where the constellation is compact, or
of no great extent, the inconvenience
is not great, and a name for the cluster
is convenient for reference.

In his Problems, Mr. Brewster exhibits the
facility with which astronomical calculations
are made by Logarithms. Thus
to find the distance of any planet from
the sun, that of the Earth being known,
The Rule is: Divide the square of the
planet's sidereal revolution round
the sun, by the square of the Earth's
sidereal revolution; and multiply the
cube root of the quotient by the Earth's
mean

mean distance from the sun.

Ex. Required mercury's mean distance from the sun, that of the Earth being 95,273.869 miles.

Mercury's sidereal revolution = 87,969250 days = 7600543", 0912. Earth's sidereal revolution = 365,256374417 days = 31558151", 5. Then $31558151,5^2 = 995916962096$ 052,25, and $7600543,0912^2 = 57748267575827,21$ (nearly) The last square divided by the first gives for the quotient 0,052005186713292, the cube root of which is 0,3870977 and this $\times 94.001.091 = 36727607$ miles for mercury's distance from sun.

By Logarithms

Rule From twice the Log. of the planets sidereal revolution, subtract twice the Log. of the Earth's ^{sidereal} revolution, and to one third of the remainder, add the Log. of the Earth's mean distance from the sun. Thus.

Mer. sid. revolution 7600543", 9 = Log. 6,8808447.

Then $6,8808447 \times 2 = 13,7616894$

Earth's Sid. Rev. 31558151" = Log. 7,4991302 and twice

this Log. $\times 2 = 14,9982604$: diff = -2,7634290 ;

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then $- \frac{2,734,290}{3} = 1,507,809\frac{2}{3}$. Totten add Log.
 Logarithm distance $7,940,9738 = 7,566,7835 =$
 mercury's mean distance $36,880,422$ miles. Note.

The Logarithms worked according to the given
 rules. We have made use of Mr Brewster's
 numbers without examining their correctness.

He remarks: "The pupil need not think him-
 self a dull scholar, if by the former method
 he comes to the result in five hours; nor re-
 markably quick, if by the latter he comes
 to it in five minutes".

In some of the Geiles, at the end, we notice
 a want of the designations of the declinations
 into N & S - always necessary.

20 To convert degrees and time mutually in-
 to each other

1 Rule multiply the given time by 15,
 carrying at 60 in the different denomina-
 tions; multiply superficially by 3 & 5.

Ex. Decline $3^{\text{h}} 48^{\text{m}} 12^{\text{s}}$ to degrees &c.

$$\begin{array}{r} 3^{\text{h}} 48^{\text{m}} 12^{\text{s}} \\ \times 5 \\ \hline 19^{\text{h}} 1^{\text{m}} 0^{\text{s}} \\ \times 3 \\ \hline \text{Degrees } 57^{\circ} 3' 0'' \end{array}$$

To convert degrees &c. into time

2 Rule

2^d Rule. Multiply the degrees &c. by 4, reckoning the seconds thirds; the minutes seconds; once the degrees minutes; carrying as in the 1st Rule.

Ex. Reduce $56^{\circ} - 13' - 12''$, to hours minutes &c.
 $\text{Hours } 3^{\text{h}} - 44^{\text{m}} - 52^{\text{s}} - 48^{\text{thids}}$

When Tables are not at hand these rules, ^{are} very convenient. See Eclips. Encey. Art Navigation, Vol 14. page 219. Brouncker's methods are less facile. See his work, p. 150. See Tables, Ferguson's Astronomy Vol. p. 157 & 158.

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Axioms.

These are self-evident truths and considered the foundation of geometrical reasoning. But in works on geometry we often find them far from being self-evident. In the treatise on this science in the Library of useful knowledge, among others we find the following.

9. If there be two magnitudes, and a third, comparable of them exceed the third by as much as the other falls short of it; the two together

shall be double of the third magnitude.

This, though a mathematical truth, hardly comes under the name of an Axiom. It is rather a theorem that requires a train of thinking.

If to some minds it is self evident, by most men, I believe, it is not at first perceived. Something like the following seems necessary for seeing the truth of the Axiom.

Let 10 = 1st magnitude

6 = 3rd mag.

2 = 2nd mag. (which must be the result of the supposition).

Then $10 - 6 = 4$

$6 - 2 = 4$

Since $10 + 2 = 12 = 6 \times 2$, or double of the 3rd magnitude.

But this cannot be called a self evident truth, like "the whole is equal to its parts"; or things equal to one and the same thing are equal to one another &c. The term postulate is more appropriate.

The treatise on Geometry, in the Library of useful Knowledge, is a good one; the diagrams being placed immediately under the propositions, under the references easy, and their arrangement is natural and well connected.

The order of the propositions differs from Euclid, but references are generally made to them. The arrangement of the propositions are as follows.

1. The enunciation, declaring what is to be done.
2. The construction, inserting the lines necessary thereto.
3. The demonstration, or course of reasoning: And
4. The conclusion, asserting that the thing required has been proved or done.

The Appendix to the Treatise contains propositions relating to projections of lines and planes of various kinds, which afford assistance to draughtsmen and artists, and such as are laid down ^{in some works} under Descriptive Geometry.

Various hypotheses have been advanced to account for this phenomenon, but none satisfactory. In several instances where these comets have descended to the earth a glistening ~~substance~~^{matter} has been found, indicating that they proceeded from a phosphorous substance supposed to be, in some way, collected in the atmosphere. But to account for the collection of this matter in the air is difficult. Some observers are of opinion that where the comets are seen in great abundance they are periodic. In the remarkable case which occurred November 13 1833, one which was seen over a great extent of country in the United States, and other places, the fall of these stars excited the wonder of the people; the whole atmosphere appeared to be on fire.

Professor Olmsted of Yale College who has attended to the subject, advances the following hypothesis to explain the phenomenon. viz. "The meteoric comets

from a nebulous body, which was then pursuing its way along with the Earth around the sun; that this body continues to revolve round the sun, in an elliptical orbit - but little inclined to the plane of the ecliptic, and having its aphelion near the orbit of the Earth; and finally, that the body has a period of nearly six months, and that its perihelion is a little below the orbit of mercury?

This hypothesis, or theory, seems to be strengthened by the fact, that the most remarkable phenomena of this kind, have occurred in the two opposite months of April & November.

But whether it will ultimately be established, time and observation alone can determine. If such a nebulous body does in fact exist, would it not, when it comes within the Earth's attraction, be wholly drawn off from its orbit, and fall upon the earth?

Two of these (Edinburgh for April, and the London Quarterly for the same month) have just come to hand.

In the latter we find a review of Capt Backs' Journal of the Arctic Land Expedition to the mouth of the Great Fish River, and along the Arctic Ocean, in the years 1833, 1834 & 1835 - one Vol. 8vo. many beautiful prints are said to embellish the work, and it is spoken of in terms of high commendation.

The Capt. and his party, of about 25, suffered hardships and deprivation, as severe as could be borne - sometimes almost without provisions, and driven to the last resource of devouring their own shoes and leather gun cases. On the 25th April 1834 the Capt. received the intelligence of the return of Capt. Pop & his party, to England. Backs party then proceeded down a River to the Arctic Ocean to the Lat. $69^{\circ} 11'$ and Long. $94^{\circ} 30' W$. They afterwards proceeded to a point of Land in Lat $68-10$ - Long. $96-20$ ^{where}

which they named Point Richardson. ~~It is~~
 To Ross's obelisk (Lat $69^{\circ} 31'$ - Long $99^{\circ} 7'$) the bearing
 was, therefore, $N 52^{\circ} W$ - distant 84 English miles.

By observations with good needles,
 the line of variation taken at Back's
 extreme point, passes a little to the east
 ward of Capt James Ross's magnetic pole.
 The Country bordering on the Arctic sea
 about Back's river, is represented to be
 composed of mountainous ridges of granite,
 porphyry, and slaty gneiss, with sandy
 barren strata over with large granite
 boulders, and without timber. The In-
 dians miserable in the extreme; often dying
 for want of subsistence.

In the same Number we find a
 Review of the History of the war in the
Peninsula since the South of France from
1809 to 1814. By Col. W. F. P. Napier. 4 Vols
 8vo.

This review is a not a one, ac-
 cording 48 pages, in which the Colonel
 is charged with a partiality to the
 French, and an unjust hostility to

the Spanish Nation. The work is
said to be "a specimen of the true French
military school" ^{embracing} not a thought
for the justice of the war - not a con-
sideration of the clamour and clam-
ouring inequity of the French invasion".
As a work for military men it
may be valuable; but this does
not appear from the review, as it
contains little in relation to battles,
even strategic operations in the field.

The memoirs of the Life of Sir
Humphry Davy. By his brother
John Davy M.D. 2 Vol. 8vo. London
1834, in the Edinburgh Review, is
an interesting article.

Geology considered with Reference
to Natural Theology - By the Rev. Wm. Beech-
er D.D. and Professor of Geology in the
University of Oxford, 1 Vol 8vo, with a
Vol. of Plates. 1834, in the London Quar-
terly, contains much matter for the
Geologist. In a former work by
this author (Reliquiae Delvianae) he

embraced the opinion that the gravel which covers a large portion of the Northern hemisphere, and the curious cave elephants of the same tract ~~were~~ ^{were} evidence of the Masonic Deluge. Further investigation have satisfied ~~him~~ ^{us} that the opinion is utterly untenable, since he quietly renounces it in the present work.

Our knowledge of Professor Buckland's Reliquiae Diluvionae, has been limited to an extended review of it in Silliman's Journal, Vol. 8. But though we were ready to acknowledge that the work was ingenious and the result of much research, we could not perceive that the Professor's opinions were strongly supported, even admitting his premises; and that a man of his science should write and publish a 4to Vol. of 303 pages, with 37 plates, and so soon after abandon his conclusions as entirely untenable is, to say the least, very singular.

On this fluctuation of opinion, the Review
 er remarks. "But may we not justly fear
 that such persons as have been led by
 the eloquent arguments of the Reliquiae
 to rely on the supposed geological evi-
 -dence of the deluge as strong confirm-
 -ation of the authenticity of the inspired
 narrative, may feel their faith rudely
 shaken on hearing from the same author-
 ity that this fancied corroboration is
 a fallacy, that the evidence is no evi-
 -dence at all, and rested on an entire
 misconception of the facts?"

The gist of the argument, in the Reli-
 -quiae, was the deposition of the bones
 of antediluvian animals in rocky cav-
 -erns in various parts of Europe, ~~and~~ found
 to be covered with a stratum of mud
 which the ^{author} supposed was deposited by
 Noachian deluge. We have considered
 this as an extremely doubtful solution
 of the phenomena noticed in caverns,
 since they might be accounted for by
 other processes. The theory of the Pro-

-fess to account for the disposition
 of granite and boulders, by elevical
 action, upon the highest mountains
 we deemed equally untenable. What
 has induced him to give up his former
 opinions does not ^{necessarily} appear from the
 review. It is said, however, that fur-
 ther geological investigations have
 produced this change of opinion;
 and may we not justly enquire whe-
 ther ^{still} further investigation are not
 likely to give another turn to the
 Professor's opinions?

That the earth was once covered by
 water there is strong indications;
 but to account for the phenomena
 in various parts of it, by elevical
 action, seems to us wholly insufficient.

The most rational hypothesis to ac-
 count for the Geological appearances
 on the Globe, ^{seems} ~~appears~~ to us to be, that
 which supposes a long period of time
 to have elapsed from the first forma-
 tion of the earth, to its final perfection.

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for the assistance of man, since this is
now supposed, by the most learned geologists,
to be the real cosmogony of man.

Among other interesting reviews in the
two numbers to which ^{they} have adverted,
the article on French Novels, in the
London Quarterly, deserves the attention
of the reader. After noticing a long
list of these books; and giving accounts
of singular trials of a capital nature
in the French Courts, the Reviewer comes
to the conclusion, that the state of mor-
als is at a low ebb in France; which
he attributes to the multiplicity of
fictitious works that are constantly is-
suing from the press of that Country.

And let me ask whether we are not
following, ^{with} some pernicious train. Already
is our Country inundated with this trash
and our young people seem eager to seize
the bait, without suspicion of the con-
cealed hook. If they have not the same
effect ^{here}, as in France, it is certain they are pro-
ductive of no good: they fix no useful principles
in the mind, but put out useful knowledge.

24 Medium Coeli, or mid-Heaven.

The Right ascension of this line is its distance from the first point of Aries, at the time and place of observation; and is found by adding to the given time the sun's right ascension at the same time, and deducting 24 hours, when the sum exceeds 24 hours.

When the R.A. of the mid-heaven and that of a star are equal, they are both on the meridian at the same ^{time}, the latter being above the pole of the heavens.

According to Burritt, a line joining Beta Cassiopeiae, which lies at the distance of 32, on one side, and Micra in Ursa Major, which lies at the same distance on the other, will pass through the polar star. Their R.A. then must differ just 180 degrees. This will hold true nearly, of Alloth and Gammma Cassiopeiae, or any other circumpolar stars whose R.A. differ the same quantity. (See page 129 of this N^o.) The

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The R.A. & Decl. of a Ursae minoris,
 on the 8th of August 1836, according to
Bessel, is as follows - $1^h 1^m 20.68$ $\text{Decl. } 00^{\circ} 25' 57.2''$
 (apparent place): the North polar distance
 then is $1^{\circ} 34' 2.8''$.

To find this Star's ^{geomet.} azimuth, the common
 Rule is

Co. Sin. Lat: Recd.: Co. Sin. Decl.: Sin of Azim.
 which at this season must be east. This
 extracted from the mag. azimuth gives the
 Variation of the Needle west.

Ex. Lat. of Deerfield $42^{\circ} 32' 32''$ N.

Co. Sin. Lat $42^{\circ} 32' =$ (Logarithm), 06740.

: Recd. ————— 10,00000

:: Co. Sin. Decl. $00^{\circ} 26'$ ————— 8,43680

10,43680

9 06740

: Sin azimuth $2^{\circ} 7' =$ 8,56940 =

the greatest elongation east, on 8th of August.

Suppose the magnetic azimuth
 to be $9^{\circ} 37'$ east; that is, the North
 Star bears N $9^{\circ} 37'$ E. at its greatest elong.
 ation, by the needle. Then $9^{\circ} 37' -$
 $2^{\circ} 7' = 7^{\circ} 30'$ the variation west.

note This azimuth is assumed, as near the truth.

25 Governor Everett's Remarks, at the meeting of the Young men of New Bedford, July 20-1836, to devise means to raise funds to complete the Bunker Hill monument.

On the utility of suitable monuments to commemorate important events, most reflecting men are agreed; and none in the History of the U.S. call more forcibly for such memorials than the battles which were fought to establish our independence. So it would be highly gratifying to see these memorials erected on the sites of all our most important battles; and we have long regretted that the heights of Stillwater and Sorentoga have not been thus designated for the gratification of those who visit these fields, now become classic ground.

But in this mode of marking these interesting scenes, one important rule should be adhered to. viz: the mon-
ument

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uments should be of moderate size -
within the limits of economy, and con-
structed of the most durable materials.
In the plan of Bunker Hill monument
~~the~~ projectors seem to have lost sight
of this rule; the cost of the work exceeds
all reasonable bounds, and this is seen
by the people whose aid was expected
in its erection. Ten thousand dollars
would have been amply sufficient to
embrace the wishes of all men of real
taste, and this sum would have been
freely contributed. Such an altitude
should have been chosen as would have
carried its summit, some height above
the buildings which might be erected
in its vicinity. The great point to be re-
garded should have been to mark the
ground to the distant where the battle
occurred, on his arrival at the spot.
It is not the magnitude of monuments
that gives them their value; but their
adaptation to the design.

The Battle of Bunker Hill or more ap-
propriately

especially Breeds-Hill is considered
 important in our revolutionary struggle,
 as it was the first real trial of the
 determination of the Country to resist
 the claims of Great Britain. But as
 a military exploit it did not exhibit
 it much military ^{practically} skill, in the choice
 of posts. More strategic knowledge
 would have taught our commanders
 the impropriety of fortifying this penin-
 sula, almost surrounded by water, of
 which the enemy were masters. It
 was, in short, a gross departure from
 all correct military rules; and had
 the enemy landed on the isthmus
 instead of Mutton's point, and ac-
 quired Bunker Hill, General Warren's
 detachment on Breeds-Hill, would
 have been compelled to surrender af-
 ter a short cannonade from the
 enemy on the former heights. The only
 point for a retreat, ^{in that case} being over the
 isthmus, ^{there} sacrificed by the British.
 The only lesson to be gathered from

this affair is, ~~that~~ marksmen posted behind works, will sometimes be able to oppose regular troops with some degree of success, when they would not stand a moment in the open field. New Orleans is another instance of this kind. We hope the time will soon come, when this ^{historical} exploit will no longer be cited as a proof of the power of indiscipline in war.

In Gov Everett's remarks, he attempts to stimulate the young men to a contribution towards the completion of the equestrian monument which a wild zeal has commenced. But reflecting men will not be ~~excited~~ ^{moved} by such persuasions; nor will they forget that the plan exceeds all the bounds of republican economy. Had the expense been limited, by the rule we have mentioned, Bruce's Hill, long ere this time, would have been ennobled with a monument suitable to the taste of republicans, and honorable to our

Country. But the error having been committed, it remains to decide what ought ought to be the future operations in regard to the completion of the monument.

Reasonable men will not be at a loss on this point. Its altitude is now amply sufficient for the object. Let there be ornamented caps complete the work, since the unnecessary flat of land surrounding the shaft, be sold for building lots, to defray the expense of finishing: and who would regret to see handsome edifices surrounding a small area, distantly marked as the centre of the battle ground.

One remark of Gov. Everett claims notice, as evidence that he has taken but a superficial view of the subject to which he alludes. He says. If for no other reasons I would build it [the monument] to teach the present generation what the now should

militia was in the days of our Fathers; to warn them how they permit the breath of a diseased public opinion to blast the nerves of the national defence, and deprive the Country, if another day of trial should come, 'if the might that Shunbears in a freeman's arms?'

His Excellency seems determined to restore the inefficient and rotten system which has been practised since the first organization of the militia by Congress and our State Government, in opposition to the opinions of our experienced officers, and others who have long examined the system.

By the divided militia system, he chooses to understand the divided militia. He may indulge himself in this manner; but he cannot thus blind the discerning public; and it remains to be shown whether ~~the~~ public opinion is diseased, or whether he & others, who ^{may} judge only from the surface" (~~as Genl Washington expressed it~~)

one laboring under a fatal chicthisis
 we cannot believe that he is ^{intentionally} at-
 tempting to destroy the militia by
restoring the old system; but we
 do see, the moment this is effected
 a relief on the militia, as a na-
tional defense, will be at an end.

We have touched upon this subject
 under the article "militia notions", in
 the former part of this number, and
 there given the opinion of Genl Wash-
 ington on this species of defense,
 with the outlines of an efficient
 militia, and shall therefore desist
 from further remarks in this place.
 (See page 13. also 16th article, remarks on 4th of
 July toasts, page 117, et seq.)

26 Tides in our Great-Lakes.

We now and then hear it asserted
 that the waters of our great western
 lakes, have a periodical rise, as if
 acted upon by some regular cause,
 and this period is supposed to be

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seven years. The present is said to be the 6th year of the rise in Lake Ontario. The belief we presume is without any solid foundation, and probably had its rise from the assertion of some one who had the boldness to advance it. The Newtonian theory of the tides is now established on a foundation that cannot be shaken, though we sometimes hear of - new theories by some pretended philosophers who wish to acquire a name.

That the waters of the western Lakes may rise and fall in different years is probable; but this variation must be small, and cannot be confined to several of years without the action of some of the heavenly bodies; and if such action be ~~supposed~~ ^{admitted} to exist, the effect would be chained and not in a period of years.

If the waters of the Lakes are found to have a rise and fall, this may be explained by other causes, than those

which produce tides in the ocean. In rainy seasons and in the Spring following great elapsing of winter snows, as in the last, the rivers may be so swollen as to occasion a small rise of the Lake waters; but these circumstances by no means occur at regular periods.

To establish the fact of such variations in the Lakes, a long series of observation and measurement made with the greatest care by those qualified for the task. When this shall be done, and the fact of the ^{periodical} rise of the waters established, we shall readily assent to it, though no regular cause can be assigned for the phenomenon. One would not withhold assent ^{to a fact}, because we are unable to explain it by known laws; but when any thing is seen to occur which seems to militate against established principles, we think it reasonable to withhold belief, until strong evidence is adduced: and here men will differ in respect to due assent. Those who are unacquainted with

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with the Newtonian theory of the tides will not readily see why they may not be found in the great Lakes, as well as the ocean; but no one who has carefully examined this theory, will be at a loss to explain the fact of their non-existence in such bodies of water. The waters of all Lakes having an outlet must necessarily subside from the abrasion of the rocks in the beds of the outlets; once there is insupportable evidence to prove that our great Lakes once occupied a much higher level than at the present time; and perhaps Lakes Ontario & Erie, if not the others connected with them, may in time, be wholly obliterated of their waters, and present extensive prairies of alluvial deposits, suitable for cultivation; in which case, organic remains may ~~probably~~ be found similar to those presented in many tracts which are now dry lands. Once such alterations in the surface of the earth afford the most easy solutions to the phenomena every where presented.

29

Variation of the Magnetic Needle
 deduced from the greatest eastern
 azimuth of a rose Mimus, or pole
 star, August 23 - 1834 = $9^{\circ} 32' 25''$ W.

The Magnetic azimuth was taken
 with an accurate circumferenter, by 2
 plumb lines suspended in a clear
 calm evening, and the true azimuth
 calculated, by the Rule given in page
 146 of this No. from the following data

Lat. of Deerfield $42^{\circ} 32' 32''$ N.

Declination of a rose Mimus $88^{\circ} 26' 29''$
 from Bessel's tables, corrected for aberra-
 tion and nutation.

True az. deduced $2^{\circ} 04' 35''$ East.

Mag. az.

$$\text{Diff} = \frac{9^{\circ} 40'}{9^{\circ} 32' 25''} = \text{Variation}$$

There being a small difference in the
 magnetic az. as given by the opposite ends
 of the needle, a mean was taken. as fol-

lows: N. end, N $9^{\circ} 45'$ E. S. end, S. $9^{\circ} 35'$ W.

Diff. $10'$. Half Diff. $5' + 35' = 9^{\circ} 40' = \text{mean}$
 mag. azimuth.

From

See the article Variations in the 18th Vol
of Ecclim. Enclim. and Illustrations in the way of
the variations, on the supposition of force more
or less Magnetic forces.

From a mean of variations determined by ¹⁵⁰
azimuths of the sun once stars, taken at
Dorset in Feb'y - 1812, the variation was found
to be 5° 20' West. Since which the de-
clination has increased 2° 45' in 21 y^{rs}
= 5' 11" a year. The change of the rev
tion of the Needle is supposed to have
taken place about 1812, the cause of
which remains to be determined. Some
writers date the change at an earlier
period, while others do not admit a
change. Mr. Gillet, Surveyor Genl of Con-
necticut, states that Dr. Bowditch finds
the declination to be diminishing as we
see, at Salem Mass. and in a conversa-
tion I held with Joseph Farrer of Har-
vard College, a few years ago, he doubted
the fact of the change. The plenary evi-
dence in support of the fact at this time
leaves no one longer to doubt. And
without a corresponding change of
variation, no ^{old} line can run in the
western part of Massachusetts, or in
the State of New-York.

28 A writer at Micamopy, East Florida August 2. makes the following judicious remarks on the men called into the field.

"The militia of our Country are brave and admirable men, but in the field they are thinking of their homes, and wives and families, of their crops and country houses, and their notes in banks. A man who has all these things to think of may be very brave, but he is unfit to be a good soldier."

Amongst the wild notions of many of our ~~young~~ patriots, who are so often trumpeting forth the prowess of citizen soldiers, and boasting of the 'might that slumbers in a fumero arm', it gives us some satisfaction to find men in the community who are ^{not} carried away by such idle vociferation.

The discerning men of Florida have had a fair opportunity to test the services of citizen soldiers, in the field; and ^{they}

they account for their inefficiency ~~for~~ the true cause. Now, they have found, may be have some good citizens and yet be wholly unfit for service in the field of arms. Similar opportunities, we are confident, would teach all advocates of the old militia system a similar lesson.

The habits and inclinations of citizen soldiers, as pointed out by the Florida writer, are by no means matter of reproach; but they are plain reasons why they ^{men} are not to be relied upon in the field, as soldiers. Nor would we wish to see them disesteemed of these commendable ^{domestic} ventures. Let such men remain at home, engaged in their proper employments, essential to the welfare of the community to which they belong.

But, ask our advocates for the old militia system, on what force would you rely for defense? We answer. Within the United States there are at least

100.000 men whose habits and incli-
 nations lead them to relish the em-
 ployments of soldiers. Let there be
 organized into proper corps under
 intelligent officers, armed and equipped
 by government, and trained in comb
 a certain number of days annually,
 once subsisted and paid while they
 are employed: this elite corps to be held
 ready for service on the shortest no-
 tice. The ^{remaining} part of able bodied
 men between 21 and 40 years of age,
 to be armed, and held to supply
 recruits for the elite, as circumstances
 may require. The men of the elite
 corps to be engaged for a certain term
 of years, once elapsed, so that when one
 part have served out their term,
 others ^{may} be taken to supply their
 vacancy. A system of this kind would
 afford complete ~~for~~ defense for the
 the States, & would be of no great ex-
 pence compared with its utility.
 We have often touched upon this

subject, and we shall not have
 space time to answer the ~~present~~ ^{present} ~~present~~ ^{present}
 time, that such a plan would
 scion of a standing army, and be
 dangerous to the liberties of the country.
 We will only ask the advocates of
 the old system, whether the "danger"
 from such a select militia, would be
 equal to that which results from
 the present useless incumbrance,
 which every military man knows
 is little better than no defence?
 One severe war would cure us of
 our present ~~frangy~~ ^{frangy} & notions, in re-
 gence to a national defence. It is
 time for our discerning ^{men} to look seri-
 ously to this important subject.

The lethargy of Congress on this sub-
 -ject is astonishing, and a severe tax
 on our own wisdom. If eagle eyed
 on other subjects, here they are in-
 clud an obstinate cataract, which can
 be cured only by the people - at the
 ballot boxes ~

The weather.

29 Since our last notice under this head, page 36, the weather has been cool for the season, and in several instances in the morning, frosts have been noticed, but not sufficient to injure vegetation very materially. At this time, September 2^d, the air is still cool, and a small frost I am informed was seen this morning. The crop of Broomcorn is very backward not more than one half of the stalks have put out their brist. Indian Corn appears more favorable, but does ^{not} promise a large crop. One fact is singular. During the summer thus far, I do not recollect one old fashioned thunder shower. Indeed it may be said we have had none excepting two or three small ones in the fore part of the season. Should the cool weather continue much longer our crops must be small, particularly that of the Broom Corn. Our second crop of Grass has suffered considerably for want of rain, and is rather small.

30. ~~The~~ Emancipator. Emancipator. 164

This is ~~the~~ title of a weekly paper recently established in the City of New York, with the motto "Proclaim Liberty Throughout the Land, unto all the inhabitants thereof". The paper is published for the anti-slavery society, and is intended to be circulated in all the non-slaveholding States, for which purpose a large number of Agents are appointed in all those States. The Editor is A. A. Phelps, who we understand is a Clergyman.

In three numbers sent to me through the Post Office, is a Discussion between Mr George Thompson, who lately resided in the States, and the Rev. N. J. Brackenridge of Baltimore, on the subject of Slavery. Meetings for this purpose are held in Glasgow in Scotland; the Rev. Dr. Wardlaw presiding of fifteen; and numerous inhabitants of that and other towns, it is said, attend the discussions. The opinions of Mr Thompson

in this Country are ~~not~~ known, as well as the unjust claims he suffered here, from those who are unwilling to touch the disgraceful subject of Slavery as it now exists in the Southern States.

The Breckinridge proposes to be a sponsor to Slavery, and ^{attempts to} show that the only means to put an end to it, is by ~~fasting~~ the Colonization Society. Vain hope! now pretty well understood by the honest part of the community.

Whether the paper will be sustained. I think is a little doubtful. Lamentable as it is, there seems to be a want of principle in a great fraction of our people; and for the support of such principles it is necessary to exhibit their emptiness. Though people may at first be roused to a sense of duty, this spirit will be found to be short lived, unless some pecuniary advantage results from it. On the contrary with reasoning we have ~~not~~ ^{noted} a similar result. In short the spirit that pervaded the country at the commencement of our Revolution seems to have become ~~diminished~~ ^{decayed} and Decayed!

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